

2008

Undergraduate Review, Vol. 4, 2007/2008

Follow this and additional works at: http://vc.bridgew.edu/undergrad_rev

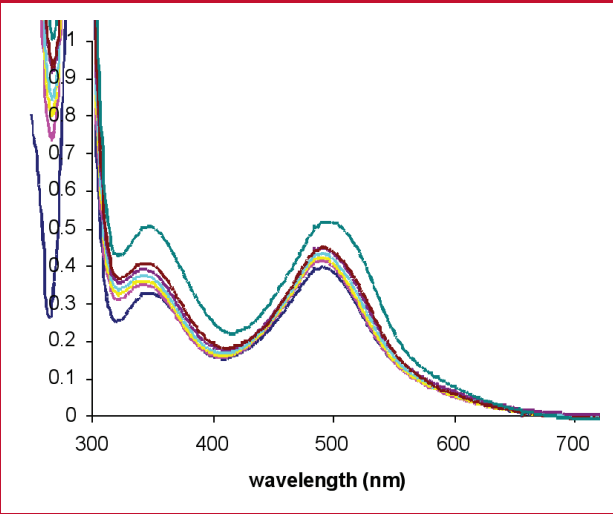
Recommended Citation

Bridgewater State College. (2008). *Undergraduate Review*, 4. Available at: http://vc.bridgew.edu/undergrad_rev/vol4/iss1/1

This item is available as part of Virtual Commons, the open-access institutional repository of Bridgewater State University, Bridgewater, Massachusetts.
Copyright © 2008

The Undergraduate Review

A JOURNAL OF UNDERGRADUATE RESEARCH AND CREATIVE WORK



Rekowski, Vezina, Le, Parece, Riva, Bragg, Hallenbrooke, Williams, Gulinello, Dwinnells, Frangipane, Lawrence, Byam, Santos, Perry, Fitch, Carriker, Murphy, Holland, Fountain, Shimp, Chase, McDonald, Sousa, Bianchini, Awasung, Woofenden, Rochon, Lowell, Martinho, Farrell, Yang, Cabral, Green

Letter from the Editor

If we knew what it was we were doing, it would not be called research, would it?

Albert Einstein

I'd like to apply this particular theory of Einstein as a pseudo-mission statement for *The UR*. Because, let's face it: the students featured in the journal weren't born writing this way. And, I wasn't born publishing an undergraduate research journal. Since 2003, we have learned about research together: the students through numerous drafts, charts, beakers, abandoned theories, and frustrating formulas; the journal, oddly enough, the same way, minus the beakers. We learned that research begins with a really good question.

For the students, the questions are different. For the journal, the question remains the same: *what is undergraduate research?* Our answer can be found in the pages of *The UR* itself: it's the construction of a soda-fire kiln, the writing of a play, the design of handheld devices that aid the disabled, research on chronicling the geology of the Black tail Mountains region, formulas to explain gravitational lensing, and so on. The journal has become an artifact of undergraduate research: a resource in building confidence among student researchers and securing a future for the program they've built.

As always, the staff of *The Undergraduate Review* would like to thank the Adrian Tinsley Program (ATP) for funding the journal; The Office of the President, the Bridgewater Foundation; faculty advisors, Drs. Laura McAlinden and Peter Saccocia, The Office of Undergraduate Research, and the faculty readers. Most of all, thank you to the dedicated BSC students and mentors for their time, effort and hard work on display here. Their work is the finest testament to the worth of not always knowing what you are doing.

It is my pleasure to present to you Volume IV of *The Undergraduate Review*.

STACY M NISTENDIRK
Managing Editor

Table of Contents

ATP GRANTS

Horace Mann's Vision in Action: Bridgewater Normal School's Female Teachers Casey Rekowski	3
The Design and Testing of Hand Held Devices to Assist Persons with Disabilities to Navigate Bus Services Daniel Fitch	9
Grandparents who Care for their Grandchildren Alzira Murphy	13
Political Violence, Child Soldiers, and Neo-Liberal Globalization: The Cases of Indonesia and Columbia Curtis Holland	17
Life Before Legal Status: The Experiences of Undocumented Immigrants LaToya Staine Carriker	25
It's All in the Words: Determining the Relationship between Newspaper Portrayal of Rape Victims and Reader Responses Amanda Fountain	33
The Chivalry Hypothesis & Filicide: Are There Categorical Differences between Mothers & Fathers who kill their Children? Meghan Chase	41
Interactions of cis-bis Ruthenium Complexes with Monosaccharides Lindsay McDonald	51
Kinematic Analysis of Mylonitic Rocks, Southern Ruby Mountains, SW Montana: Evidence for Proterozoic Orogenic Crustal Thickening and Topographic Collapse Jessica Sousa	57
Synthesizing and Characterizing $\text{Sr}_2\text{FeMoO}_6$ Bulk and Thin Films Louis Bianchini	65
Synthesis of Phenoxides with Pendant Amines and Catalytic Intramolecular Hydroaminations Kenneth Awasung	71
Listen to this: The Effects of Judicious Listening in the Play, <i>A Mourning Recap</i> Colleen Farrell	79
Superconducting Phases in Bulk and Thin Film La_2CuO_4 Brandon Green	85

NCUR: NATIONAL CONFERENCE OF UNDERGRADUATE RESEARCH

Religious Heresy and Radical Republicanism in John Milton's, <i>Paradise Lost</i> Lisa Riva	95
.....	
Progression and Cycles: Historical and Societal Change in James Fenimore Cooper's, <i>The Pioneer</i> Jessica Martinho	101
.....	

COURSEWORK

The Sovereignty of the Individual: Thoreau's Call for Reformation in <i>Walden</i> Bradford Vezina	109
.....	
<i>Rasselas</i> : A Realist's Narrative on the Quest for Ideal Happiness Lauren Le	115
.....	
The Qin and Han Dynasties: The Flexibility and Adaptability of Military Force and Expansion Christopher Hallenbrook	120
.....	
Lost Leviathans: The Technology of Zheng He's Voyages Mark Dwinnells	127
.....	
A Reason to Read: Fiction-Affirming Fiction in Alice Munro's <i>Open Secrets</i> Nicholas Frangipane	133
.....	
Ethnicity and Accountability: Recent American Fiction Stephanie Lawrence	141
.....	
The Modernization of Resistance: Latin American Women since 1500 Melanie Byam	145
.....	
Turning Tides Alex Perry	153
.....	
Trust Us...We're the FBI Benjamin Shimp	157
.....	
Fish to Fry Aimee Rochon	163

1ST & 2ND YEAR WORK

A Mother's Courage Jeremy Bragg	171
.....	
In Technology We Trust Courtney Parece	173
.....	
A Joyful Soul: A Case History of a Bridgewater Nursing Home Resident Heidi Woofenden	177
.....	
Two Worlds Blair Gulinello	181
.....	
Marching Band Stephanie Santos	185
.....	
How to Write an Editorial Gary Lowell	189
.....	
My Paradise Jun Yang	193
.....	

HONORS THESIS

Reading the Gardner: Viewership, Readership, and Public Art Nicole Williams	197
.....	

SHEA SCHOLAR AWARD

Clara Schumann: A One-Woman Musical Dynamo Jean Cabral	209
---	-----

Faculty Advisor's Note

I am very pleased to present to you Volume IV of *The Undergraduate Review*. The journal has grown significantly each year since the first, expanding diversity while maintaining its high quality. The mentored work you will find in this volume is wide-ranging. The Adrian Tinsley Program Grants section contains the results of the work of students who worked under the guidance of a faculty mentor during the ATP Summer Grant program. The opportunity for this ten-week research experience is open to all undergraduates, including both students with outstanding academic histories and students who show great promise. Grants are approved based on the quality of student proposals, and you will see the results of the extraordinary efforts these students produced. The section of National Conference on Undergraduate Research includes work presented at the annual conference. Student submissions face rigorous competition from applications from across the nation. The section of Honors Thesis includes portions of honors theses produced by students who pursue Departmental Honors in their major program. The section on Coursework includes submissions that were originally produced as work for a course, and the same is true for the section on First & Second Year Work. All papers included in the volume were chosen only after being scrutinized by faculty with expertise in the individual disciplines. Thus, the journal is a review of excellence, representing a cross-section of some of the best mentored research and creative work produced by Bridgewater State College undergraduate students.

Production of *The Undergraduate Review* is made possible by the financial support of the Bridgewater Foundation, and the leadership and support of BSC President Dr. Dana Mohler-Faria. Dr. Nancy Kleniewski supports our product and our mission. Dr. Ron Pitt, my supervisor, offers advice and encouragement at every turn. I cannot give enough credit and thanks to Dr. Lee Torda and Dr. Ann Brunjes, whose significant efforts paved the way and laid the sustaining foundation for the continued success of the publication of this journal. Thanks go to Kathy Frederick in the OUR, who keeps us sane, relatively cheerful, and focused. Stacy Nistendirk, managing editor, deserves particular credit for her professionalism, commitment, and diligence. I am grateful to the faculty readers, who take on the burden of reviewing submissions and assure that the journal presents high quality work.

Finally, thanks must go to the students who desired to share their work with the larger campus community. You should be proud, not only to be included in journal, but also to present your work as inspiration for students who follow your example. To each of the mentors who worked with students, whether as course instructor or long-term mentor, your dedication to the profession is highly commended. Our students could not succeed without your help and support.

LAURA MCALINDEN

Co-Coordinator, Adrian Tinsley Program for Undergraduate Research
Faculty Advisor to *The Undergraduate Review*
Assistant Professor of Philosophy

ATP Grants

THE UNDERGRADUATE REVIEW
VOL. IV

Horace Mann's Vision in Action: Bridgewater Normal School's Female Teachers

CASEY REKOWSKI

Casey graduated summa cum laude from Bridgewater State College in May of 2007, earning a Bachelor of Arts in History and a minor in Secondary Education. Casey conducted this research, which was partially funded by an ATP summer grant, under the mentorship of Dr. Margaret Lowe of the History Department. This excerpt represents a small portion of her Honors Thesis which was accepted by, and presented at, the National Conference of Undergraduate Research in 2007. Casey is currently teaching Social Studies at Silver Lake Regional High School. She plans to pursue her masters and doctoral degrees.

Abstract

Through a close reading of Horace Mann's archival material including official documents and speeches, this paper argues that Horace Mann expanded women's social roles in the nineteenth century. Whether he intended such an outcome or not, Horace Mann's agenda to improve common schools increased American women's educational and professional opportunities. Drawing upon the popular ideology of the day, Mann articulated a detailed rationale for placing women, as "natural teachers" at the center of public education in Massachusetts when he became the first secretary of the Massachusetts Board of Education in 1837. This can best be seen through his annual reports to the Board of Education as well as how his ideas took shape at one of his original three normal schools, Bridgewater State Normal School. The normal school gave women academic experience above the high school level—which was usually reserved for men, and trained them for the noble profession of teaching. Mann's philosophy of women, which was widely disseminated, was limited by contemporary ideas about gender, his political position, and the constraints of establishing a school specifically to train a corps of common school teachers. Despite this, Mann does show a progressive awareness of women's issues for his time period that should not be overlooked. Since this aspect of Horace Mann and his normal schools has not been widely studied, this honors thesis, completed in the Fall of 2006, contributes new knowledge about gender and educational policy during a pivotal moment in American history.

In 1837, Horace Mann accepted the position as the first secretary to the Board of Education in Massachusetts; his mission was to improve the public school system in the state. One of his most revolutionary changes to the system included establishing normal schools for the express purpose of training a core of well-trained teachers who could then, he believed, transform the public schools. His ideal normal school student would be female, as Mann believed they were "naturally" suited by God to instruct young common school children.

Teaching and education had traditionally been considered men's responsibilities however, Mann circumvented this tradition by promoting a particular form of education for women— that of normal schools, and a particular type of teaching-working with young children in common schools. Thus, Mann's plan for improved common schools brought women outside the home without interfering with the traditional notions of women's proper domain. Using the popular ideology of his

time, Mann carved out a more public space for women without directly challenging the separate spheres ideology. He believed that women were perfectly capable of mastering the art of teaching which he considered to be “the most difficult of all arts, and the profoundest of all sciences.”¹ Not only could they master the role of teacher, they were naturally inclined to succeed in this role because of their God-given roles as mothers and designated roles as moral guardians. Female teachers would benefit the state as well; they cost much less than male teachers did. Mann was not considered a women’s rights advocate or a feminist; however, he was willing to offer women an expanded role in society as long as he could embed it within the widely accepted separate spheres ideology.²

Mann, like many of his contemporaries, subscribed to the theory of the true woman and the separate spheres. Over and over again, in his writings, Mann celebrated wife, mother, and womanhood in general. In his annual reports and lectures, Mann emphasized women’s virtuous character and their positive social influence. He also noted the more limiting aspects of the ideology, “As a general law,” he wrote, “the man surpasses the woman in stature, [and] in physical strength.”³ He also observed that

Young men, it may be said, have a larger circle of action; they can mingle in more promiscuous society, -at least they have a far wider range of business occupations... But the sphere of females is domestic. Their life is comparatively secluded. The proper delicacy of the sex forbids them from appearing in the promiscuous marts of business.⁴

Mann believed that these differences were acceptable, and even a product of God’s work and intention. It was “the Creator Himself...[which]... created the race, Male and Female, ON THE PRINCIPLE OF A DIVISION OF LABOR.”⁵ The natural differences and characteristics, in Mann’s mind, were “everlasting distinctions which God has established between man and woman.”⁶

While identifying with all the contents of the separate spheres ideology, particularly those which identified women as care takers of the nation’s children and the moral guardians of the nation, Mann qualified his idea of the spheres a little differently. Instead of speaking of two completely separate entities, each belonging to one of the two sexes, Mann called what was traditionally referred to as the “Women’s Sphere,” a “Hemisphere” in of the orb of human interactions.⁷ He emphasized one sphere divided in half, instead of two wholly, independent spheres. He wrote that in these hemispheres, “each [of the sexes] is necessary as the complement of the other.”⁸ This is a powerful visual that carries a significant psychological impact. Rather than assuming that individuals

would understand the two spheres to be complimentary, Mann made it clear, by discussing gender relations as two halves of one sphere, that the division of labor represented the essential balance and interdependence of the two sexes. While the more traditional approach divided the world into two seemingly unconnected, completely opposite domains- public and private- (which further implied that one was not required for the full functionality of the other), Mann used one sphere divided in half to stress that while the hemispheres are not alike, “there is a mutuality of superiority” between them.⁹ Even in his hemispherical view of gender relations, Mann called the women’s half of the sphere, the “upper and nobler half of the orb of human duty;”¹⁰ this is similar to his contemporaries who believed that women, even as members of the private sphere of society, were important contributing members of society. Unlike those who believed that women were upholding their responsibilities in their sphere, Mann believed that women, because they were deprived of education and even from teaching in the classroom, had “not been allowed to fill [their] semi-circle.”¹¹ He wanted women to have a larger, more active role within the hemisphere that they were assuming; this larger role included education and teaching. Mann argued that a woman’s education and her innate domesticity complimented each other. As an example he wrote:

See Mrs. Somerville mastering science by science, and comprehending world after world, until her own mind becomes, as it were, a transcript of the universe; and then writing out, with a lucidity which can be borrowed only from nature’s light, the glorious harmonies and adaptations of the Creators works, until, in perusing her pages, we seem to hear, even with the natural ear, those hallelujahs of praise to His name with which all nature is vocal; while, at the same time she attends to all her domestic concerns, and makes her own house, for order, simplicity and neatness, like the grand machinery of nature she so loves to contemplate.¹²

This demonstrated and supported Mann’s argument that women could balance education, morality, and domestic concerns. Education would not jeopardize these aspects of women’s proper hemisphere.

Even though women’s traditional role involved caring for children, Mann had to demonstrate how these innate abilities transferred to the classroom setting; this was not an easy task. In his *Ninth Annual Report*, Mann recounted how the concept of female teachers was not immediately accepted:

Six or eight years ago, when the employment of female teachers was recommended to school committees, not a little was said against adopting the suggestion. But one committee after another was induced to try the experiment, and the success has been so great that the voice of opposition is now silenced. So far as can be learned from the committees' reports, I believe there is now an unbroken unanimity among them, on this subject.¹³

This shows that Mann successfully convinced the school committees of the benefits of hiring female teachers for the common schools; he obviously made compelling arguments. Like others arguing for a more expanded role for women, Mann used the ideology in his day to expand American women's roles in the society he lived. By emphasizing that female common school teachers used the same maternal instincts that they would use in their own home with their own children, Mann demonstrated that "teaching, especially of small children, was outside the public, male sphere because the school [was] an extension of the family."¹³ Mann, as a politician, recognized that using this approach "affirmed [society's] belief in the uniqueness of women and [it] offered a reassurance that proposed changes in women's activities would benefit society."¹⁴ He claimed that "Education... is women's work;- the domain of her empire, the scepter of her power, the crown of her glory."¹⁵ He used traditional ideals of womanhood, namely women's innate ability to care for and guide children, as well as her virtuous nature and moral superiority. These justifications permitted Mann to expand the women's sphere to fit his needs without grossly clashing with society's norms and expectations for women. Mann's proposal for a more expanded role for women allowed him to accommodate his goals for an improved common school system in Massachusetts.

The traditional gender roles for women bolstered Mann's argument for female teachers. Since femininity and true womanhood were associated with motherhood and caring for the children in the home, Mann felt that females could easily apply their skills in the classroom. According to Mann, "the Author of nature pre-adapted [women], by constitution, and faculty, and temperament for this noble work [of teaching]."¹⁶ Mann adamantly believed that women were naturally endowed to be common school teachers, and he frequently argued this point in his annual reports and lectures. He believed that

There is nothing a girl can learn, that a woman is incapable of teaching, when properly trained; and in many cases- as everyone knows from frequenting Sunday schools,- women make better instructors than those of the other sex. Women have often more talent for conversational teaching (the best of all forms of instruction,) more

quickness of perception in seizing difficulties by which the mind of a child is embarrassed, and more mildness of manner than a master commonly possesses; and when these important qualities are combined with the proper degree of firmness, (and that, too, may be acquired,) they cannot be excelled.¹⁷

The female teacher, Mann wrote, "holds her commission from nature,... [as] all the differences of organization and temperament which individualize the sexes point to females as the guide and guardian of young children."¹⁸ Her "natural sympathy, sagacity, [and] maternal instincts preeminently qualify her for this sphere of noble usefulness."¹⁹

Teaching in common schools, Mann believed, required the same types of skills that were inherent in all females; teachers used the same disposition, gentleness, and nurturing ability as mothers did. He thought that "[women] should be the educator of children;...[and that this was] as much a requirement of nature as that she should be the mother of children."²⁰ He argued that woman's "stronger parental impulses [endowed upon them by nature]" and "more mild and gentle manners," made them "more in consonance with the tenderness of children," and thus "better teachers" than their male counterparts.^v He also contended that,

females will teach young children better than males, will govern them with less resort to physical appliances, and will exert a more genial, kindly, a more humanizing and refining influence on their dispositions and manners.²¹

Mann praised women for their grace, faith, and purity, along with their natural spirit of love and affection for good; he believed that these were all important qualities for individuals working with children to possess. Based on women's natural, God-given abilities and characteristics- specifically their natural affinity of children- Mann argued that women were better suited as common school teachers than men. "Female teachers," Mann believed, "are nine cases out of ten better adapted to promote the improvement of our children in learning than teachers of the other sex...three-fourths of the pupils could be better taught by them than by our most able male teachers"²²

In addition to promoting women as common school teachers because of their inborn maternal instincts, Mann further advocated for more female common school teachers because he believed that women were morally superior to men. This superiority, according to Mann would permit females to instill their morals in the common school students they taught. "[Female teachers]," Mann wrote "are ...of purer morals," and "more fit than males to be the guides and exemplars of young children."²³ She naturally "revolts from vice."²⁴ Women's prerogative is "to lift our world

from its degradation... and adorn it with all moral adornments.”²⁵ They had, in Mann’s mind, the unique, “reflex power of elevating others.”²⁶ Females, unlike their male counterparts, “utilized their more “forbearing nature and a nicer delicacy of touch, to remove the evil” within students and replace it with virtue of conduct and character.”²⁷ This moral superiority was important to Mann, because he believed that common schools “were the only agency capable of moral education in an age of endemic sectarianism.”²⁸ He believed that schools should instill morals and virtue within the students who attended in order to form citizens filled with republican ideals and character. In order to do this, the teachers themselves had to be the moral examples for the children who attended. Since high moral ideals came naturally to women, he believed female teachers would help him achieve his moral ideals for the common schools.

Women’s moral superiority made females better common school teachers for another reason: their purer motives for teaching in the common schools. Unlike their male counterparts, who taught school between college breaks to support themselves financially, female teachers were less likely to use teaching as a temporary employment or a stepping stone to another career. Mann thought it “preposterous” that many males “[kept] school for a few years in order to obtain the means of entering the medical or legal profession.”²⁹ Teaching for such impure reasons set a bad example for the students left in their charge. Mann appreciated the fact that, women’s minds were

less withdrawn from their employment [as] they are less intent and scheming for future honors or emoluments.... as a class they never look forward, as young men almost invariably do to a period [when they may] go abroad into the world, to build up a fortune for themselves; and hence, the sphere of hope and of effort is narrower, and the whole force of the mind are more readily concentrated upon present duties.³⁰

Because of the fact that women’s opportunities were so limited, they did not have many options outside of teaching to aim for, let alone leave their teaching positions for. If females sought some sort of professional status, teaching was really their best and only option.

In addition to their natural affinity for teaching and their positive moral influence on future generations, Mann viewed female teachers as economically advantageous to his plan to improve common schools. Acknowledging the great disparity in wages between male and female teachers, Mann, wrote, “is in not an unpardonable waste of means, where it can possibly avoided, to employ a man at \$25-\$30 a month, to teach the alphabet, when it can be done much better, at half price, by a female teacher?”³¹

At the time, the average monthly wages of males in the state was \$33.08 while the average monthly wages of females for the same school was \$12.75.³² Obviously, saving money by hiring women as teachers in the common schools would allow school districts to do a number of other things to improve the quality of the schools- from purchasing textbooks or lab equipment, to improving the school building, extending the school term, or even hiring more teachers. It would even provide the state with excess funds to support more normal schools. In Mann’s opinion, advocating for women to teach in the common schools was quite a bargain. “A female will keep quite as good a school as a man, at two thirds of the expense,” Mann wrote.³³ To show the extent of the savings accrued by hiring female teachers, he discussed in his *Eleventh Annual Report* that the money saved though the increased proportion of female teachers saved the state \$11,580.04 that year, almost equivalent to “double the expense, of the three state normal schools.”³⁴

Although Mann’s primary motivation for even discussing female teachers and their education at normal schools was due to his intense desire to improve the common schools in Massachusetts, Mann certainly held an awareness of women’s issues that should not be ignored. Mann used his understanding of the confines of the separate spheres to empower and support new roles for women in nineteenth century society, particularly in the field of education- both as teachers in the common school classrooms, and as students in the normal schools. Mann wrote that women should be educated “not because it is her right, but because it is essential to the world’s progress”³⁵ Normal schools promoted the idea that women were capable of being educated, and that women could participate in a wider social venue for the greater good of society.

Endnotes

1. Horace Mann, *First Annual Report of the Board of Education Together with the First Annual Report of the Secretary of the Board* (Boston: Dutton and Wentworth, 1837), 58.
2. The sources most influential to my research were: Jeanne Boydston, "The Pastoralization of Housework," in *Women's America: Refocusing the Past*, ed. Linda Kerber and Jane Sherron De Hart. (New York: Oxford University Press, 2000); Ellen DuBois, and Lynn Dumenil. "Chapter 3: Pedestal, Loom, and Auction Block. 1800-1860." In *Through Women's Eyes: An American History with Documents*. (Boston: Bedford/ St. Martin's, 2005); Linda Eisenmann. "Assessing the History of Women's Education a Dozen Years after Barbara Solomon." *Harvard Educational Review*. 67 (Winter 1997) 689-717. Christine A. Ogren, *The American State Normal School: An Instrument of Great Good* (New York: Palgrave Macmillan, 2005); Rosalind Rosenberg. "The Limits of Access: The History of Coeducation in America" In *Women and Higher Education in American History: Essays from the Mount Holyoke Sesequential Symposia*. Edited by John Mack Faragher and Florence Howe. New York: W.W. Norton & Company, 1988. Carol Smith-Rosenberg, "Beauty, the Beast, and the Militant Woman: A Case Study in Sex Roles and Social Stress in Jacksonian America." In *Woman and Power in American History* Vol. 1, 2nd edition. Edited by Kathryn Kish Skylar and Thomas Dublin. (Upper Saddle River: Prentice Hall, 2002); Barbara Miller Solomon. *In the Company of Educated Women: A History of Women and Higher Education in America*. (New Haven: Yale University Press, 1985); Nancy Woloach, *Women and the American Experience*, (New York: McGraw-Hill, 1996).
3. Horace Mann, "Lecture 1," in *A Few Thoughts on the Powers and Duties of Women: Two Lectures*. (Syracuse: Hall, Mills, and Company, 1853), 23.
4. Horace Mann, *Third Annual Report of the Board of Education Together with the Third Annual Report of the Secretary of the Board*. (Boston: Dutton and Wentworth, 1839), 87.
5. Mann, "Lecture 1," 17, emphasis in original.
6. Ibid., 11.
7. Mann, "Lecture 1," 11.
8. Ibid., 17.
9. Ibid., 23.
10. Ibid., 11.
11. Horace Mann, "Lecture 2," in *A Few Thoughts on the Powers and Duties of Women: Two Lectures*, (Syracuse: Hall, Mills, and Company, 1853), 73.
12. Mann, "Lecture 1," 60.
13. Horace Mann, *Ninth Annual Report of the Board of Education Together with the Ninth Annual Report of the Secretary of the Board* (Boston: Dutton and Wentworth, 1846), 34.

14. Ogren, *The American State Normal School*, 11.
15. Louise Michele Newman, "Chapter 1: The Problem of Biological Determinism (1870-1890)," *Men's Ideas/ Women's Realities: Popular Science, 1870-1915*. (New York: Pergamon Press, 1985), 2.
16. Horace Mann, "Lecture 2," 85.
17. Horace Mann, *Eighth Annual Report of the Board of Education Together with the Eighth Annual Report of the Secretary of the Board* (Boston: Dutton and Wentworth, 1844), 60.
18. Horace Mann, *Fourth Annual Report of the Board of Education Together with the Fourth Annual Report of the Secretary of the Board* (Boston: Dutton and Wentworth, 1840), 97.
19. Horace Mann, *Sixth Annual Report of the Board of Education Together with the Sixth Annual Report of the Secretary of the Board* (Boston: Dutton and Wentworth, 1842), 28.
20. *Ibid.*, 31.
21. Mann, "Lecture 2," 82.
22. Mann, *Fourth Annual Report*, 45.
23. Mann, *Ninth Annual Report*, 34.
24. Thomas Woody, "Chapter 10," in *A History of Women's Education in the United States*. (New York: Science Press, 1929), 501.
25. Mann, *Fourth Annual Report*, 45-46.
26. Mann, "Lecture 1," 29.
27. *Ibid.*, 10.
28. *Ibid.*, 12.
29. Mann, *Sixth Annual Report*, 29.
30. Jonathan Messerli, *Horace Mann: A Biography*, (New York: Alfred A. Knopf, 1971), 263.
31. Mann, *Ninth Annual Report*, 34.
32. Mann, *Fourth Annual Report*, 45.
33. *Ibid.*, 28.
34. *Ibid.*, 33.
35. *Ibid.*, 46.
36. Horace Mann, *Eleventh Annual Report of the Board of Education Together with the Eleventh Annual Report of the Secretary of the Board* (Boston: Dutton and Wentworth, 1847), 26.
37. Mann, "Lecture 2," 86.

The Design and Testing of Hand Held Devices to Assist Persons with Disabilities to Navigate Bus Services

DANIEL FITCH

Daniel is a senior majoring in Mathematics and Computer Science. This paper is the result of research conducted through the Adrian Tinsley Program under direction from Dr. Uma Shama and Mr. Lawrence Harman. This research is a continuing project that will be expanded into an Honors Thesis and will be presented in the National Conference of Undergraduate Research in April 2008.

Abstract

Many transit systems around the U.S. are using global positioning systems to track their buses. Some of these systems provide bus locations in real-time on web maps. With internet integration becoming common in portable electronics, this research project analyzed the opportunity to utilize mass market devices to assist the general public and persons with disabilities to access and navigate fixed route bus services. This study has taken advantage of the state of the art automatic vehicle location systems aboard the Cape Cod Regional Transit Authority and MetroWest (Boston) Regional Transit Authority bus services, Microsoft Virtual Earth mapping services and Microsoft MapPoint Web Services to design, build and test hand held device interfaces and powerful web applications on personal computers for transit customer information systems. These technologies can provide all consumers, particularly transit consumers with disabilities, with improved access to mainstream bus services.

Introduction

This report presents the result of an Adrian Tinsley Project Summer Grant to research hand held devices to aid in navigation of bus services sponsored by the Office of Undergraduate Research, the Bridgewater State College Foundation, and the President's Office. The objective of this research initiative was to research and develop methods for accessible information delivery of transit information to consumers. Specific objectives included:

To conduct a literature survey in order to explore what tools are available to consumers currently for geospatial location of transit systems, both vehicles and routes.

To analyze and make any necessary changes to the information delivery system currently in place at the GeoGraphics Lab receiving current data of vehicle location.

To develop a web interface in order to deliver the information through a highly accessible medium.

To extend the web interface to automatically cycle through the available routes on the transit system in order to be used for a large automated display.

To research hand held device interfaces and to create an interface accessible on hand held devices.

Three primary sites were used for collection and delivery systems. These sites were 1) Bridgewater State College's (BSC) transit service running routes throughout the BSC campus and a connection route into Brockton, MA; 2) the Cape Cod Regional Transit Authority, (CCRTA), running routes throughout the peninsula of Cape Cod, Massachusetts; and 3) MetroWest Regional Transit Authority, running routes throughout the MetroWest region of Boston, Massachusetts. The use of these sites allowed the study of multiple transit route systems, including fixed route systems and a demand response system provided by the CCRTA's Flex Route Service. It also enabled a collaborative use of GeoGraphics Lab and CCRTA resources in order to purchase and set up a large flat panel display at the Hyannis Transportation Center to test a large display prototype for information delivery.

There were three main forms of delivery that were designed and tested. These delivery methods were a 1) a personal digital assistant (PDA) powered by the Windows Mobile 5.0 Operating System, 2) Web systems using the Microsoft Virtual Maps Interface readily available through computer web browsers, and 3) a large high-definition flat screen display running at an intermodal transportation center.

Although this project was initially designed to have a primary focus on American with Disabilities Act (ADA) accessibility to be built directly into the programs, however it was later determined that the focus of the development should be to coordinate with existing programs and technologies readily available to those persons with disabilities. These technologies include text reading and magnification programs built into the Microsoft Windows Operating System and more powerful and focused programs. Another focus became ensuring that the information was available through multiple platforms, allowing for the most accessibility regardless of the user's technological ability or current device availability.

This report will describe the project as well as the methodology used, provide the result of the analysis of the systems, offer lessons learned through the project in the form of a conclusion, and include examples of data received and the systems developed.

Project Description

Task 1: Literature Survey

Task Description: A brief review was conducted on 1) current and upcoming advancements in the transit field with respect to real time positioning and location devices, 2) appropriate mapping interfaces to run such programs on wireless Personal Digital Assistants (PDAs) and smart phones using available mapping software, 3) the programming language of the mapping API to be used for best practices and capabilities and 4) ADA requirements for the communication of transit information.

Methodology: This review was undertaken using internet search engines (e.g. the National Academies' Transportation Research Board on-line transportation information research database, TRIS online) to find current technical and news web sites of these issues and capabilities. I was also able to use quite a few current texts on the issues and programming methodologies provided under the grant stipend.

Task 2: Analysis of Information Delivery Systems

Task Description: An analysis of Assisted Global Positioning System (A-GPS) data from the busses being received prompted modifications to the software programs of the Nextel/Motorola i355 cell phone so the geographic information would be received at an extremely high refresh rate (2 – 4 seconds) with improved reliability. This provided the most accurate and up to date information to the consumer.

Methodology: The researcher worked collaboratively with other GeoGraphics Lab staff in order to improve two systems. The first was a Mobile Data Terminal (MDT) program developed for the Motorola i355 cell phone using the Nextel iDen network for data transmission. Data refresh rates were somewhat unreliable on what was called the MDT 2.0 program. With the development of MDT 2.1, refresh rates were consistently under 5 seconds. The second system used data being received from Mentor mobile data terminals to a central server at the Cape Cod Regional Transit Authority Operations Center. A program was developed that utilized Structured Query Language (SQL) Stored Procedures and C# libraries for data transmission on the web in order to extract the data from the SQL Server located at the Operations Center and transmit it to a SQL Server housed at the GeoGraphics Lab in order for plotting and analysis purposes. Prior to research work this summer, the GeoGraphics Lab was only receiving geographic data from the buses equipped with mobile data computer transmitting over a private radio network using a BSC-developed Java program. A C# program developed by the Lab during the summer transmitted GPS locations from a new fleet of buses using a new sophisticated mobile data computer over a public data network (PDN) operated by Sprint™. Data from these two "legacy" systems were combined with the A-GPS automatic vehicle location (AVL) data on three "trolleys" running in Wood's Hole on one integrated intermodal "Cape Cod Transportation Partners" web mapping application at the GeoGraphics Labs www.geolabvirtualmaps.com using Microsoft's Virtual Earth mapping platform.

Task 3: Develop a Web Interface

Task Description: The researcher then used the information collected in Task 2 to create a web interface for the Bridgewater State College transit system, MetroWest Regional Transit Authority, and Cape Cod Regional Transit Authority that can be used by consumers for tracking real-time spatial information on the operation of the respective bus system.

Methodology: Microsoft Active Server Pages (ASP.Net) 2.0, Javascript, Microsoft Virtual Earth, Microsoft MapPoint and the C# Programming Language technologies were used in the Microsoft Visual Studio 2005 Integrated Development Environment (IDE) to program a web mapping interface that is able to take the Latitude Longitude information that is being received by the buses, translate it into a nearby street address (reverse geocoding), and plot the information on a map that uses high resolution imagery and has route data programmed. This information is then hosted on an Internet Information Services (IIS) Web Server located in the GeoGraphics Lab that is widely available for anyone with internet connectivity.

Task 4: Extend the Web Interface for an Automated Display

Task Description: In order for the web interface to be widely available to those who may not have internet connectivity or are uncomfortable with the web interface as well as for those with mild visual impairments, an automated display of the information was to be developed.

Methodology: A display was strategically placed in the Hyannis Transportation Center that utilized an extension program of the web interface to cycle through the available routes of the Cape Cod Transit system, showing the real time locations of the buses as they traveled. A large screen (46") Liquid Crystal Display (LCD) flat panel display attached to a computer was used to show this modified program. The program demonstrated all the mapping features of the Cape Cod Transportation Partners real-time AVL web mapping application, including 1) map display at small and large scale; 2) map display of roads, aerial/satellite photography and hybrid combinations of the two; 3) a display of the area covered by each route, then display of the route using the road map, and a display of the route using the high resolution vertical imagery, 4) then a display of the route from a "bird's eye" perspective of 45 degrees from an elevation of 450 feet, and 5) in all cases the real-time location of the buses were being displayed at a refresh rate of 5 seconds. The software program for the Hyannis Transportation Center displays all the routes on Cape Cod in this manner; ending with the Hyannis Transportation Center location and high-resolution oblique photograph of the HTC with real-time display of buses at that particular moment in time. Please see the appendices for pictures of this display.

Task 5: Research and Create Methods to Deliver Information Over Hand Held Devices

Task Description: The researcher then looked into ways to deliver the information to personal hand held devices for accessibility using the Microsoft Windows Mobile 5.0 Operating System and Personal Digital Assistants (PDAs), however, future applications using "smart phones" was included in the research conducted on this task.

Methodology: Microsoft's ASP.Net 2.0 and SQL technologies were used to create web pages that would follow high web standards and be only text and table based so that such pages would be accessible on multiple hand held devices with web browsers that are capable of interpretation of ASP pages. The same reverse geocoding technology was incorporated into these pages for ease of use. These pages were then tested using a PDA purchased through the summer grant material stipend. Other accessibility programs were also researched for the Windows Mobile Operating System, such as magnifier programs and text to speech programs.

Analysis

The Federal Transportation Administration (FTA) recognizes that public transit serves many public purposes, but cites the most fundamental of them to be what they call "affordable mobility". They state that "All transit systems provide low cost mobility for people who do not, or cannot, operate a motor vehicle because of personal preference, low income, disability, youth or old age. An important characteristic of low cost affordable mobility service is that regular access is provided to as many destinations as possible. Triptypes include, school, medical, business, shopping, recreation, social, etc. It is estimated that these types of trips comprise about 65 percent of total transit ridership."¹ The interfaces created under this project serve as tools in order to navigate the services available to all people in a more effective manner. Knowing where the buses are in real time helps consumers to know when they need to be at their bus stops and if the buses that they will need to take in order to reach their destination are on time. By creating three different platforms to deliver this information, all consumers regardless of their current technical knowledge and equipment are able to utilize the service in some way or another, whether it be from home before they start their trip, while they are navigating the services by themselves, or while inside transfer stations or other strategic locations for heads up displays. For future work and resources, it may be able to be possible to have one of these automated displays at every stop, especially with the reduction of display prices. For the handhelds, it was surprising that they were still not able to handle the full Microsoft Virtual Earth or Google Maps platforms. Thus, highly accessible text

1. http://www.fta.dot.gov/publications/reports/other_reports/publications_134.html

based pages were created. With more powerful handheld devices increasingly available (such as the Palm Treo running Windows Mobile or the Apple iPhone running a modified version of OS X) it is only a matter of time before handhelds will have the capabilities to support full mapping platforms. Until that day, the text based page solution, developed by this research, provides the transit consumer with a PDA with precise and timely real-time information on bus locations in the palm of their hand. Thanks to the effort by Microsoft and Apple to adapt their devices for use by individuals with visual impairments there are many available text to speech programs.

Conclusion

There were many more projects than initially considered in order to achieve highly reliable and constant data from all of the transit information systems. A workflow of the data transmission can be found in the appendices. Currently, geospatial data is received and mapped in the range of 2 sec – 2 min depending on the devices capabilities and transmission times that are used to collect it.² For transit vehicles using the BSC A-GPS AVL cell phones, the refresh rate is a world class 2-4 seconds. This information is then plotted on the Microsoft Virtual Earth platform. The Virtual Earth platform was chosen for this project because of its integration with the C# and ASP languages, the availability of the MapPoint Services for reverse geocoding purposes, the quality of the high resolution birds eye aerial and Pictometry imagery, and the commitment that Microsoft has made to its platform. For fiscal year 2007 for example, Microsoft is spending upwards of \$500 million on its Live platform, which includes Virtual Earth.

There are multiple benefits of a web system deployment for this project. This includes providing spatial information to the visually impaired with the proper software, being able to have large displays for visibility anywhere that can handle a computer, display, and internet connectivity hookup as well as being accessible on mobile devices that continue to grow in power and extensibility.

2. TCRP Synthesis #70 Study on MDTs, Dr. Uma Shama and Mr. Lawrence Harman

Grandparents who Care for their Grandchildren

ALZIRA MURPHY

Alzira is a senior majoring in social work. This research began as a project funded by the Adrian Tinsley Program at Bridgewater State College this past summer under the mentorship of Dr. Arnaa Alcon. Alzira hopes to attend graduate school and pursue a career in hospice.

Introduction

Grandparents caring for their grandchildren is a growing social phenomenon. These adults are a generation older than the child's parents and can be more than 70 years older than the children for whom they care. Do grandparents recognize the increased likelihood that they may become unable to care for their grandchild before the child becomes independent? What arrangements do grandparents who are the sole caregivers for grandchildren put into place for care of the child(ren) in the case of disability or death of the grandparent? These questions, on which the literature is silent, are the subject of this study.

Literature Review

Background and Demographics for the United States and Massachusetts

Analysis of the 2000 Census data reveals that:

- 4.5 million children, 6.3% of all children under age 18, are living in grandparent-headed households;
- this represents a 30% increase in the decade 1990-2000
- in Massachusetts, there are 67,781 children, 4.5% of all children in the state, living in grandparent-headed households (AARP,2005)

Grandparents of all ethnic/racial groups and socioeconomic statuses care for grandchildren, though the majority are White (47%) or African American (29%).

Grandparents become the fulltime caregivers for their grandchildren under a variety of circumstances including substance abuse, teen pregnancy, divorce, incarceration, emotional problems, abuse of the grandchild by a parent, mental and physical illness, including AIDS, and parental death (Fuller-Thomson, et al, 1997; Goodman, 2007; Kroll, 2006; Hayslip, et al, 2003-2004).

Health of the Grandparent

Grandparent caregiving is associated with several negative psychological out-comes including depression, heightened stress, and low life satisfaction (Gerard, Landry-Meyer and Roe, 2006). Rates of depression among custodial grandparent are twice that of non custodial grandparents. The physical health of grandparents is negatively affected by the custodial role. Grandparents also report significantly lower satisfaction with their health than do non-custodial

grandparents. Feelings of isolation are likely to occur as custodial grandparents have less contact with age peers. Suddenly custodial grandparents have less in common with people their own age (Miltnerberger, et al, 2003-2004).

The different legal status of grandparents raising grandchildren

There are a number of different legal statuses that grandparents can have over their grandchildren. Some have temporary guardianship; others may have permanent guardianship or adopt the child. The type of guardianship becomes important in establishing who is responsible for setting up arrangements for the child(ren) in the event of the grandparents death or disability. Options for grandparents vary by state. In Massachusetts relatives and non-relatives alike can become foster parents. Three of the most frequently used types of foster care include kinship care, child-specific care and unrestricted foster care (UMASS, 2002). Kinship care is for children who are living in the home of a relative or significant other adult as stated under the DSS definition for kinship. Child-specific care is for children who are living with someone outside the family with whom they are familiar. Unrestricted foster care is for children who are placed in foster homes with families who have been licensed by the Department as a partnership resource to provide care for a child not previously known to the foster family.

Subsidized Guardianship is offered as a permanency option for children who have been in state custody, but are not likely to return to their parents and are not candidates for adoption. To be eligible for subsidized guardianship the child must live with the caregiver for a minimum of six months while in state custody.

Method Participants

The research sample consisted of eleven grandmothers who met four criteria: 1) they currently are the primary caregiver for at least one grandchild; 2) the grandchild resided in the grandparent's household; 3) the grandchild's parents did not reside in the grandparent's household, and 4) families reside in southeastern Massachusetts. The grandmothers used for this research were recruited from support groups in Brockton, MA and Plymouth, MA and from personal contacts. After the grandparents were identified and recruited, grandparent caregivers were contacted by phone and a date and time was set at their convenience, in their home. The grandparents signed a consent form; a one hour qualitative interview was conducted in English followed by a survey consisting of 27 questions. All interviews were taped and later transcribed for analysis. To supplement these data community leaders were also contacted for an interview. The interviews were approximately half an hour long in length, recorded and transcribed.

The final sample contained eleven grandmothers ranging in age from fifty-one to seventy-five. Five were married, one was separated, three were divorced, and two were widowed. None of them considered themselves Hispanic or Latino, six were Caucasian, four were African American, and one was African American/American Indian. Their annual income ranged from \$0-25,000 to over \$101,000, only two are still employed full time, two were disabled and unable to work, six were retired, and one a homemaker. The majority of the households have income in the range \$0-25,000 annually, with only one over \$100,000 annually, with the other three families falling in-between. Their education was five graduated high school, four had some college, one had a graduate degree and one attended nursing school. In total, these eleven grandmothers care for 19 grandchildren, nine boys, and ten girls, ages four to twenty-three.

These families consist of anywhere from two grandparents in the home with three grandchildren (only one is in the care of the grandparents), a married daughter and her husband, son, and a friend of one of the grandchildren, to a family consisting of one grandmother with her granddaughter. In the families interviewed three report special needs with all the children and three report special needs in a child. The grandmothers reported the children's special needs as psychiatric, individual education planning, Attention Deficit Disorder, Attention Deficit Hyperactivity Disorder, Pervasive Development Disorder, Asperger, reading disability and Bipolar. Four of the grandmothers report being responsible for all the day to day care of the grandchildren, five share the responsibility with a partner or a spouse and two grandchildren are over the age of twenty-one and responsible for themselves. For the children under the age of 21, five grandmothers report making most of the decisions regarding the grandchild's well being alone; four share the decision making with a partner or a spouse. Due to the children's disability, two of the grandmothers anticipate retaining a large measure of day-to-day responsibilities for the grandchildren.

In addition to the grandmothers I also interviewed five community leaders informants: Nicole Welch, a care advisor for Old Colony Elderly Services, Inc., Jass Stewart candidate running for mayor of Brockton, Constance Dilego a social worker/outreach for Plymouth Council on Aging, Representative John A. Lepper from the city of Attleboro, and Anna Deschamps, Assistant Director of the Wrentham Council on Aging.

Findings

Health of the Grandparents

Eight out of the eleven grandparents reported their general health as good to excellent. When asked if in the past four weeks, how much did pain interfere with normal work including both work outside the home and housework, one was extremely bothered,

three were moderately bothered, four were only bothered a little, and three were not bothered by pain at all.

When asked how much of the time during the past four weeks did they have a lot of energy, three reported a little of the time, three some of the time, two a good bit of the time, two most of the time and one reported having energy all of the time.

When asked how much of the time during the past four weeks have they felt calm and peaceful, one reported all of the time, two most of the time, two some of the time, three a little of the time and three never felt calm and peaceful.

What events trigger grandparents to assume the role of parent for their grandchildren and how do they experience that role?

As in the literature, grandparents interviewed came to raise grandchildren for a variety of reasons. In my sample of eleven, the grandparents inherited the grandchildren because of 1% got divorce, 27% were too young to care for the children, 18% were on drugs, 9% had a mental deficit, 9% died young, and 9% had an emotional issue. When I asked the grandmothers what it was like to care for their grandchildren, the faces were different but nine answers were the same: “not easy”. One grandmother actually admitted “I really didn’t want her. I was 43 years old, my daughter was 20, and I had just gone through the horrors of hell with her teenage years.” She later did say that now she considers the granddaughter company. In addition to the drain of everyday life, another reason these grandmothers could be tired is financial. Five of the eleven get some sort of assistance from the state. One grandmother said she receives \$150.00 for clothes. She says “\$150.00 is just for a coat”. Two of the families receive supplemental security income; another three families receive death benefits from the mother’s death and 9% reports getting no help at all. Two of the eleven grandmothers thought it was “wonderful” and would do all over again.

When I asked the grandmothers whether their lives were different, seven answered “yes”. One grandmother said, “oh very, very diabolically yes”! Another grandmother said, “I don’t have the patience, if I go out I have to take the baby with me,” another complained about the Department of Social Services saying that “I was overwhelmed; the two social workers I had been dealing with hadn’t followed through with anything”. Three of the grandmothers said no. One said, “I think that is the Christian way of living, I don’t think I am the only one that feels that way,” but out of my sample of eleven, she in fact was the only one who did feel that way.

Will the grandparent remain the primary caregiver or will the child return to his/her parent(s)?

The majority of grandmothers will remain primary caregivers of their grandchildren. One grandmother whose granddaughter is now twenty-three said, “I hate to admit this but yes”. This is an example of how some are expected to care for these children well beyond the age of eighteen. Only one grandmother said no, she no longer considered herself primary caregiver because “he is twenty-one”. Four out of the eleven families have gone on to adopt the children, one has no legal guardianship of the child and has to rely on the mother and the remaining have legal guardianship.

The majority agree that the long term goal is to keep their grandchildren in school. One is not sure what the plan is, another said “she will be no better off in five years than she is today”, one grandmother fears her grandson will end up in a gang and would like to send him to military school.

What would happen to your grandchild if you could no longer care for him/her?

Grandparents have done no formal planning for the care of the children in the event of their incapacity. Out of eleven grandmothers, only two have a legal document giving the name of a guardian in the event of the grandparent’s death. Before taking on her grandson, one grandmother discussed it with her children so that when they went to court, they not only adopted the grandson, they had planned what would happen to him in case of the grandparent’s death. The other grandmother who has a guardian did so because, “before I could adopt my granddaughter I needed to have a guardian written in court but I don’t have it in a will”. As for the other grandmothers, it’s not that they don’t think about the future; they absolutely do. They are all concerned with education. One grandmother whose granddaughter has a disability worries about “services for her, companionship, she doesn’t have any friends”. One grandmother said, “we already set up a college fund for her and are gearing her mind to go that way, you know, her mother always drilled in her head to be somebody”.

In my interviews with the grandmothers I found them to be very open with their stories until I raised the topic of planning, asking what would happen to the grandchildren, do you have a will, and have you discussed this with any one. Nine out of the eleven do not have anything formal in place for guardianship of the grandchildren. Their plans are not clear. For example, when I transcribed the oral interview one grandmother wrote four pages trying to answer the question: what would happen to her granddaughter if something happened to her?

When a seventy-year old grandmother answered the question of what would happen to her granddaughter if she could no longer take care of her, at first her answer was, “well she is twenty-three and I don’t see her life changing so, if I were to die she would lose it. I asked her if she had a plan when she and her twin were younger, she responded: “I never thought about it”. One grandmother said “I ask the lord to let me make it another fifteen to twenty years I ain’t greedy just want to make sure they are alright”. If the grandmother lives another twenty years, she will live until the age of eighty. According to the Center for Disease, an African American woman can expect to live 62.7 years.

Professionals

In an attempt to fill gaps left by the grandparents, I interviewed people who work in or are involved in four different communities: Nicole Welch, a care advisor for Old Colony Elderly Services, Inc., Jass Stewart candidate running for mayor of Brockton, Constance Dilego, a social/outreach worker for the Plymouth Council on Aging, Representative John A. Lepper from the city of Attleboro, and Anna Deschamps, Assistant Director of the Wrentham Council on Aging. All community members admitted to knowing grandmothers who are sole caregivers of their grandchildren. The majority of these community members feel that resources for this population is limited. As a group they feel that grandparents raising their grandchildren is a growing problem and becoming a trend which most attribute to drugs and alcohol.

Recommendations

My recommendations for policy and programming for grandparent families are as follows: 1) Financial support for grandparents who cannot afford legal assistance with many legal implications of guardianship and planning; 2) Respite services and summer activities for the grandchildren; 3) Senior services and support groups for older persons which include child care, and; 4) Coordination between child welfare and elder services to get much needed resources to these families.

Areas for further research

Further research is needed in the area of grandparent as caregivers. The policies and practices in family court needs to be assessed as they deal with placing children with grandparents who may be elderly. Available interventions and services should be evaluated and adapted to better suit both the caregiver grandparent and grandchildren. Finally, society as a whole needs to look for ways to curtail the various situations that are putting grandparents in caregiving roles.

Political Violence, Child Soldiers, and Neo-Liberal Globalization: The Cases of Indonesia and Columbia

CURTIS HOLLAND

Curtis is a senior at Bridgewater State College. He was honored to be afforded the opportunity by the Adrian Tinsley Program for Undergraduate Research to conduct research on a subject that he cares about deeply. The research helped him finalize his decision to pursue a career as a social scientist and academic, as well as to work for causes rooted in social justice. Curtis deeply thanks his mentor, Dr. Jonathan M. White, for guiding him as a burgeoning sociologist. He is also thankful to The Undergraduate Review for giving him this publication opportunity. Curtis will be entering graduate school in 2008 to begin his Masters in Sociology, and plans to then pursue a PhD. e.

The paradigm of war has been the most constant and destructive aspect of human civilization throughout history. The horror of war, carried out by two opposing sides each proclaiming moral authority, is perhaps the most haunting and paradoxical of human capabilities. In many modern wars, however, “tactics of ethnic cleansing and genocide have replaced the strict codes of conduct and chivalry” that had protected the innocent from violent conflict over past centuries from Africa to China. (Singer 2006:4) Crimes such as rape, torture, and the recruitment of children as soldiers have increasingly become regular weapons of war in the most deprived regions of the Third World.¹ In Africa and the war in the Balkans during the 1990’s, over 90 percent of casualties were civilian, compared to 50 percent in World War 2 and 10 percent in World War 1. Disturbingly, moreover, there are hundreds of thousands of child soldiers in the world today. (Singer 2006:4-5)

This result has not been born of an innate human dissolve in moral fabric or of moral deficiencies between cultures. The cause is rather predominantly centered in socially constructed phenomena on a global scale; a construct of transnational power elite whose prerogatives lie in the concentration of wealth and power, and who overlook the necessary obligations of power must yield to those who bear the unwanted affects of a steep, global, hierarchal structure. The aim of the author is to uncover the systemic implications of corporations, governments and international financial institutions and how they have worked correspondingly to cause and exacerbate poverty, violence, and political and social unrest by promoting a unilateral agenda of global capitalism. This paper hopes to clarify how the collective actions of these entities has worsened simultaneously both abysmal poverty and political violence in the developing world. I will focus on two countries in different hemispheres, Colombia and Indonesia, to reflect the global pervasiveness of this problem.

Martin Wolf (2005:16), a proponent of neo-liberalism, states: “Because space always matters, so does territorial control. Because territorial control matters, so do states. For this simple reason, economic processes will not compel the death of states, unless a state is expunged, whether voluntarily...or *forcibly* [emphasis added].” However, because “the [current] state of war has...become our permanent global condition...war has become *regulating* by constructing and imposing its own legal framework...” (Hardt and Negri 2004:22) In other words, the truncated possibilities of national stability and the killing of many *are*

in accord with such economic processes. As such processes cause instability, those who threaten the stability of the destabilizing order, as is only a rational conclusion, must be forcefully cut-down through military means.

The Arms Trade

The neo-liberal system of our time has allowed almost all aspects of civilization, both material and immaterial, to become subject to international trade, including arms (assault rifles, grenades, mortars, etc). Easy and cheap access to small arms due to constant expansions of international 'free-trade' fuels internal conflict throughout the developing world. (Singer 2006) These weapons likely end up in the hands of rebel groups as well as state armies and paramilitaries, some of which are hired by governments and multinational corporations to protect petroleum, coal, and natural gas extraction sites. (Chomsky 2006; Aviles 2006; Pilger 1996; 2005) Companies such as Exxon Mobil in Indonesia, Shell in Nigeria, BP and Occidental Petroleum in Colombia, and Total and Unocal in Burma, among others, have partnered with the brutal governments of these countries. (Vogel 2005; Pilger 1996, Aviles 2006) Meanwhile, as one of many unfortunate examples, rebels that infiltrate the Kenyan border from surrounding war-torn African countries such as the Democratic Republic of Congo and Burundi can purchase an AK-47 for roughly the price of a goat, \$5 U.S. (Singer 2006:48) Peter Singer (2006:47) also clarifies that "the consequences [of the "glut of the market" in small arms] is that the primary weapons of war have steeply fallen in price over the last few decades. This has made it easier for any willing organization to obtain them and then turn children into soldiers at a minimal cost." Meanwhile, more than 60 percent of arms worldwide stem from 38 U.S companies, with many newer, lighter models easier to operate being placed in the hands of children. (Chomsky 2006; Singer 2006) Bever (1996:252) claims, in the case of Africa, that little access to sufficient land and food has engaged many young men and boys to take up arms and ignite guerrilla or tribal warfare. Meanwhile, there is more than enough food in the world to feed everybody with plenty left over. (Gallagher 2006) Further, as pointed out by Singer (2006), many rebel groups who otherwise would not have the resources and numbers to effectively wage war against the state, can, however, when the recruitment of children is exercised. While basic foodstuffs, infrastructure, and sanitation is extremely lacking in many developing countries, the high availability of sophisticated weapons at cheap costs allows disgruntled and impoverished groups to wage hate-mongering, destructive wars. While a child may not have access to basic sanitation or be able to overcome malnutrition, he or she may still have access to a gun.

Anderson, Cavanagh and Lee (2005:64) claim that "the U.S government has used globalization as an excuse to loosen restrictions on arms exports, arguing that U.S weapon makers

need to export more to stay globally competitive." U.S arms exports doubled between 1987 and 2000. (Anderson, Cavanagh, Lee 2005:64) Though 96 percent of the U.S population opposes the free-sale of arms, such an international market is "strongly supported by high-tech industry," apparently overriding public opinion. (Chomsky 2000:128) This shows who the workings of policy at the highest levels primarily serve, even while helping to fuse violence and oppression abroad. Meanwhile, a mere 80 billion dollars, one-half of one-percent of global income, can provide sufficient food and basic housing, health services, and education to all poor children in the developing world. (Gallagher 2006) Priorities of those in power are evidently backward.

Indonesia

The poor of Indonesia have long been subject to a brutal and corrupt military, supported tacitly by much of the West. The arms trade has been disproportionately favorable to the British and U.S economies, as the allies sharply escalated their arms exports throughout the last two-and-a-half decades. Indonesia became the number one recipient of British arms throughout the 1980s, gaining access to U.K aircraft, tanks, and machine guns, all used in the illicit invasion of East Timor. (Pilger 1998; Chomsky 2003) Blum (2005:188) clarifies, moreover, that illegal embargos containing U.S military arms increased throughout the late 1990's as the number of Indonesian atrocities in East Timor correspondingly accelerated. Between 1975 and 2000, the Indonesian military slaughtered well over 200,000 out of a population of 700,000 East Timorese, using British and American arms. (Pilger 1998; Chomsky 2003; Blum 2005; Parry 2005) At the same time, Indonesia has long been considered by many U.S elite as "the greatest prize of Asia," in the words of Richard Nixon, for its rich supply of natural resources reaped by Western companies. (Pilger 1998; 2001; Blum 2005) An unfathomable amount of political violence abroad has become apparently acceptable when appropriated to the interests of Western business. Though it is unfortunate that many developing regions, holding a disproportionate amount of the world's natural resources, have politically corrupt and often violent leadership, it can not be considered acceptable to rationalize tacit cooperation and support for brutality for national capital interests of the West.

Today, there are at least 1,000 active child combatants in Indonesia. The ethnic conflict currently engulfing the Indonesia province of Java, where Islamic rebels are violently pursuing autonomy from the State, has involved the use of child soldiers by both sides, equally brutal. Children as young as seven years old have even been sent to the battlefield with firebombs in their backpacks.² (Singer 2006:26,120) Despite the human rights abuses and atrocities that have been carried out for over four decades by the brutal Indonesian military, the TNI, the Bush Administration has recently asked for \$6.5 million in military aid

for Indonesia, and, without consulting Congress, has invoked a national security waiver to override longstanding human rights restrictions on aid to the Indonesian military. Such action is simply unconscionable given the Indonesian regime's irrefutably horrendous record of human rights violations.³ Instead of urging a diplomatic resolution, the Bush administration continues to stand behind unilateral ideological rationalizations for violence. Yet violence is rarely, if ever an acceptable solution to violence, especially when principles of justice are ignored by the world's most powerful government supporting a brutally oppressive regime they consider allies.

Conditions brought on by the IMF in Indonesia have been largely implicated as causal factors of the East Asian Economic Crisis which decimated the Indonesian economy, preceding widespread outbreaks of ethnic conflict in the country. (Stiglitz 2002:18) Nouri Abdul Razzak of the Afro-Asian People's Solidarity Organization stated that "the [neo-liberal] policies of the international financial institutions are contributing to the impoverishment of the world's people, the degradation of the global environment, and the violation of the most fundamental human rights." (Chomsky 2000:136) Such liberalization policies include the privatization of state owned enterprises; devaluation of currency; reduced taxes on imports; and weakening of labor standards, among others. (Gallagher 2006) "The majority of local [Indonesian] companies [were] devastated by interest rates of up to 50%" resulting from the banking structure implemented by the IMF in the country.⁴ According to Kingsbury (2002:75), Indonesia's debt in June of 1997 was US \$115 billion, more than 60% of the country's GDP. By mid-2000, such debt had reached a high of \$140 billion. Moreover, during the economic collapse in Indonesia, 20 million more people began earning less than a \$1 a day. The number of Indonesians living in poverty doubled, and the effects are still felt, disproportionately, by women and children.⁵ When hungry populations then rose-up amidst the economic collapse, the Suharto regime ordered numerous offensives to violently cut-down the mostly non-violent protests. People of all ages were murdered in mass executions. 39,000 people were killed in such operations during the latter half of the 1990's and the Suharto regime faced no international penalties. (Simons 2000:226; Parry 2005) Loans continued to flow from the IMF and World Bank partnership into the hands of the Suharto regime amidst obvious corruption and atrocities, without changes in distribution methods to better reach the poor. (Pilger 2001; Stiglitz 2002)

While the country is still recovering slowly from the economic collapse, a great deal of state terrorism is sanctioned in Indonesia today as an efficient way of initiating profitable projects on land

inconveniently home to thousands of poor Indonesians already in desperate economic situations.⁶ These projects, in turn, have generated little wealth back into areas of the economy where it is needed most, like education and health care, as foreign capital often leaves the country as fast as it enters. (Pilger 2001; Kingsbury 2002:70)

An Amnesty International report notes that in January of 2007, a child and two others were shot and killed when security forces working under government control opened fire on the village of Waghete.⁷ There were a total of six other incidents around the same period of time where security forces shot unarmed civilians during forced, large scale evictions. These "evictions" are government ordered operations where police, military officials, or gangs hired and armed by the government use force to clear out slums for building or oil exploration performed by a majority of foreign companies.⁸

Exxon Mobil is one company taking part in such oppression in Indonesia. The massive U.S oil and coal company has been reported by several sources as having directly employed Indonesian military units to provide "security" for their oil and gas extractions and liquification projects. These forces have committed gross human rights abuses such as destruction of property, torture, rape and murder. Exxon has even provided equipment and grounds for the Indonesian military which was used to dig mass graves and facilitate torture. Meanwhile, Exxon has generated over \$40 billion from its operations in Aceh, Indonesia.⁹ Ironically, the massive energy company had the 26th largest economy in the world in 2005, surpassing the economy of Indonesia, ranked 31st. (Anderson, Cavanagh, Lee 2005)

Instead of choosing to redirect actions toward thwarting such oppression as a necessary reciprocal condition of investment, companies chose to work with the violent regime. Although rebels do threaten the extraction operations of multinationals in Indonesia and elsewhere, such companies are not exempt from moral obligation to *all* people presiding in the areas which they operate. Further, investment and international loans must be carried out in a way by which they can reach those who need the most economic assistance, which with today's technological capabilities is certainly achievable. Instead of attempting to enervate violent governments and promote peace through financial incentives, many of the most powerful corporations and governments have decided to appropriate violent cycles for their own gains and institutional objectives. Meanwhile, violence ensues and spreads among and between civilian groups and militants alike. (Parry 2005; Kerbo 2006; Pilger 1998)

Colombia

The implications of armed conflict in Colombia are perplexing, and, almost in equivalence to the situation in Indonesia, correlate positively and disproportionately with increasing neo-liberal conditions. The Colombian Constitution of 1991 documented a transition into what Aviles (2006:19,125) refers to as a form of “low-intensity democracy” implemented by a “transnational elite” of Colombian and US allies both seeking economic liberalization in Colombia. Such liberalization has occurred in order to primarily enhance the wealth of the Colombian elite and open up access for transnational corporations, mostly in extractive sectors. (Aviles 2006)¹⁰ As in the case of Indonesia, the “reforms” implemented since 1991 have included privatizing state-owned businesses, liberalizing financial markets and foreign exchange, and weakening labor protections. (Aviles 2006:1) Elite capitalists, both foreign and Colombian, have profited much off the “ruin of farmers through low tariffs on imports.”¹¹ (Hylton 2006:79) Further, like in Indonesia, such changes would be enforced through a stream of violence that continues today. (Aviles 2006; Hylton 2006) Amid the economic changes of 1991, Colombia witnessed the highest homicide rate in the country’s history. (Hylton 2006:79) People who quickly became impoverished as a result of these changes often took to crime to generate needed income that was lost as a result of economic liberalization, sometimes turning violent, while leaders of the opposition were systematically removed by state-sanctioned force. (Arboleda et al. 2004; Hylton 2006) The U.S and its home-based companies were able to avoid condemnation by the international community for supporting violence by simply referring to Colombia as a democracy, meanwhile generating revenues in collaboration with the Colombian elite that had no inclination of moving toward real democratic reform. (Aviles 2006; Hylton 2006)

Neo-liberal conditions were further promoted in the mid-1990’s when then President Pastrana signed a structural adjustment contract with the IMF requiring deep cuts in government spending, reducing restrictions upon foreign investment, and further accelerating the privatization of public enterprise. (Aviles 2006:124) Meanwhile, as state-supported violence increased in Colombia, the U.S correspondingly increased military aid. In 1991, amidst the origin of the vast economic liberalization of Colombia, the number of youths murdered increased by 70%.¹² By 1999, U.S. military aid to Colombia had increased from \$50 to \$290 million, while in 1998 there were 1,332 killed in 201 massacres and 2,500 individual assassinations. In 1998 alone, 10,000 farmers and peasants were displaced by a combination of coal mining and paramilitary force. Oxfam has claimed that “deepening poverty [compounded by neo-liberal impositions] is one of the main driving forces behind the civil conflicts which are creating unprecedented numbers of refugees [in Colombia].”¹³ Colombia had the second largest number of internal refugees in 2003 after

Sudan at around 3 million. (Chomsky 2003:52-53) The negligence the U.S government has shown in recognizing atrocities committed by the Colombian government and the violent groups it endorses allows it to continue rationalizing a pro-violence policy centered distinctly in gaining access to land rich in oil and coal, even while millions of Colombians suffer as a direct result. Pretexts of fighting terrorism in Colombia are obviously only attributable to guerrilla terrorists, not to state militias operating under revenue largely provided by Washington.

Despite a 52% increase in total GDP of Colombia from 1980 through 2000, both inequality and poverty increased drastically. (Aviles 2006:14) Moreover, equivalent to what happened in Indonesia, deregulation of the Colombian economy resulted in short-term capital flow which in turn led to a national economic crisis and banking collapse during the latter half of the 1990’s. (Aviles 2006:13; Kingsbury 2002) After significant economic growth from 1978 to 1995, the economy began to decline in 1997 and turned to negative 4.5% in 1999. Unemployment then doubled to 20 percent, inequality rose, and macroeconomic performance declined.¹⁴ (Arboleda, Petesch, Blackburn 2004:3) As was the case of Indonesia, the economic conditions brought on by IMF policies were direct causes of the economic crisis in Colombia. (Hylton 2006:79; Pilger 2001) In 1998, further exacerbating Colombia’s financial instability, the IMF stepped in to sort out the Colombian economic crisis through the same conditions that primarily caused it.¹⁵ Meanwhile, the poverty resulting from the economic collapse only worsened the hostile situation of Colombia’s civil war, creating an inescapable paradox of misery for the disproportionate amount of Colombians in poverty. (Aviles 2006; Hylton 2006; Arboleda et al. 2004) The national Colombian poverty rate in 2006 was 65 percent, while the rural rate was an unbelievable 85 percent. (Arboleda et al. 2004; Aviles 2006; Hylton 2006) The economic liberalization the U.S successfully helped the Colombian elite implement has increased levels of poverty in the country, becoming a main driving force of the conflict the U.S has become willingly embedded to, which will be detailed shortly. (Arboleda et al. 2004; Aviles 2006; Hylton 2006)

Amidst the country’s economic decline, foreign direct investment as the percentage of Colombia’s GDP ironically doubled between 1996 and 2002, mostly from energy and finance sectors. (Aviles 2006:91, 57) This was largely a result of the formation of the U.S.-Colombia Business Partnership, which was a lobbying group made up of Occidental Petroleum, GE, Enron, Texaco, and Colgate-Palmolive. This group successfully lobbied President Clinton to sanction trade with the Colombian government. (Aviles 2006:79,131)

The Revolutionary Armed Forces of Colombia (FARC) and National Liberation Army (ELN), the two largest and most active rebel groups in the country, have greatly opposed the neo-liberal conditions that have engulfed Colombia. The FARC and ELN promote a nationalistic and socialist agenda. As unregulated economic liberalization has been implemented in the country, the operations of both the FARC and ELN have become more brutal. (Aviles 2006:23) It was not until the early 1990's, simultaneous to neo-liberal impositions of deregulation, privatization, and weakening of labor protections that the use of child soldiers became a huge problem in Colombia.¹⁶ The number of guerrilla fighters in Colombia more than doubled from 1994 to 1999, due largely to the excessive recruitment of child soldiers from less than 10,000 to more than 20,000 combatants. (Aviles 2006:92)

Colombia has the fourth largest number of child soldiers in the world. The UN has estimated such numbers to be as high as 14,000, with at least two-thirds being under fifteen years old.¹⁷ A quarter of all combined soldiers in Colombia are less than eighteen years old.¹⁸ (Singer 2006:16) Children as young as seven years old have been recruited by the FARC and by age eight are trained to use assault rifles and forced to engage in combat.¹⁹ (Singer 2006:16-18) Many times, the youngest units, known as "small boy units," are put in the front lines. These young children, being considered expendable by rebel leaders, have even been sent to the front lines naked in an attempt to confuse and create sympathy from the enemy and are often the first killed. (Singer 2006:86) Also, if a child loses a weapon, he or she is often forced to enter combat without one until able to retrieve a replacement from the enemy.²⁰ 40 percent of all killed rebels in Colombia are less than eighteen years old.²¹

Rural poverty and inequality resulting from neo-liberal impositions have stabilized a "market for recruits" of child soldiers for both sides. (Aviles 2006:104) "Social disruptions and failures of development caused by globalization, war, and disease have led not only to greater global conflict and instability, but also to generational disconnections that create a new pool of potential recruits," including, disproportionately, children. (Singer 2006:38)

Another change that came with Colombia's "low-intensity democracy" reform and economic liberalization in the early 1990's was the formation of armed civilian paramilitary groups funded and supported indirectly by the Colombian government and military and directly by agro-exporters, narco-traffickers, cattle ranchers and agrarian elites. Such paramilitary groups are hired to forcefully maintain the present order in Colombia, terrorizing the civilian population and violently ridding the country of non-supporters of the current order. The paramilitaries, collectively known as the United Self-Defense Forces of Colombia (AUC),

have proven to be as brutal as the guerrilla groups. 70 percent of all political killings in Colombia during the 1990's were attributed to paramilitary factions.²² (Aviles 2006:4; Hylton 2006:80) Yet these groups have also murdered trade unionists, human rights leaders, priests, homosexuals and children living on the street or belonging to political dissidents. (Chomsky 2003; Hylton 2006; Arboleda et al. 2004) One case in February, 2005 involved the murder and dismemberment by a paramilitary group using machetes of three children belonging to a political subversive, aged 2, 6 and 11, and one 17 year old boy. (Hylton 2006:123) Such atrocities are funded indirectly by the U.S government, as it has invested well over \$3 billion in the Colombian Military since 1999. (Blum 2005; Aviles 2006; Hylton 2006) These paramilitary groups have become contract-killers. (Hylton 2006:12-13; Arboleda et al. 2004:30) Among numerous companies, Coca-Cola has been accused of being complicit in paramilitary executions of several union leaders in the company's Colombian bottling plants.²³ Such cases give evidence to an unfortunate phenomenon: while "civilians have always suffered in war... the difference is that in many present day conflicts they are the primary target." (Singer 2006:4)

As stated by Chomsky (2003:60), "the proportion of atrocities attributed to the paramilitaries has been increasing as crimes are privatized in accord with neo-liberal practice..." As a result of rebel attacks, companies have signed contracts with military and paramilitary personnel to provide security for oil and coal extraction.²⁴ Yet human rights abuses have steadily increased in Colombia since these companies have signed contracts with military personnel in 1996.²⁵ The same unit hired by Occidental Petroleum is known for the brutal massacre of ten civilians in 1994. Though Occidental's pipelines have been attacked a total of about 500 times and as much as up to 50 times in one year, costing the company as much as \$3 million a day for ten days of forced closure, it has generated hundreds of millions in Colombia annually.²⁶ (Coghlan 2004:134-135) In Casanare, where British Petroleum operates, the army killed at least two civilians peacefully protesting the company. Moreover, on August 5, 2005, the Colombian paramilitary brigade employed by Occidental assassinated three union leaders, Jorge Prieto, Leonel Goneyeche, and Hector Alirio Martinez. Since that time, the company has only employed sixty individuals who are members of a union.²⁷ Thus, the violence serves at least three functions in this case: maintaining the current order in Colombia, ensuring successful extraction operations, and saving labor costs for disproportionately foreign companies.

Colombia has proven invaluable to a multitude of foreign, especially U.S, firms, and has even been called a "trial-run for private war contractors." U.S. defense contractors are currently receiving half of the money given by Washington to combat

the FARC and ELN and fight the “war on drugs.” In 2006, \$300 million was spent by the U.S. State and Defense Departments on home-based private contractors.²⁸ DynCorp is the largest private military contractor working in Colombia, described by some as performing “mercenary” operations. Furthermore, the Colombian National Police are the world’s largest user of Bell’s Huey II Helicopters, used to patrol Occidental Petroleum’s pipelines in Colombia.²⁹ (Hylton 2006:118) Thus, the ulterior motive of U.S involvement in Colombia is clear when one U.S-company is generating revenue protecting the operations of another U.S.-based company in a foreign country that is literally torn apart. Moreover, the Lockheed Martin Corporation, another U.S.-based enterprise, does much work on Colombian aircraft, and has seen profits triple between 2002 and 2006 to over \$80 billion.³⁰ A main objective of U.S involvement in Colombia has clearly been to appropriate tactics of the civil war to the benefit of U.S companies, even at the expense of innocent, impoverished Colombian lives.

Instead of withholding investment in Colombia until something positive is done about the violence, the multinational companies and U.S government have continued to comply with business as usual. The companies, governments, and military contractors seemingly consider themselves above the rule of international law, and the innocent people caught in the middle of a hellish war zone are ignored by the state, the complicit corporations, investors and financial institutions, and the international community alike. The failure of these entities to sufficiently acknowledge the suffering in Colombia and elsewhere has contributed to a worsening in the types of violence prevalent in impoverished, war-torn regions, as people become increasingly desperate while on the edge of survival. (Hylton 2006; Kerbo 2006) While the morale of the impoverished is bled through their macroeconomic and political repression, the “higher immorality”³¹ of the transnational elite has held strong.

Conclusion

While valuable natural resources are extracted and exported West by mostly Western companies, impoverished masses in places like Colombia and Indonesia are denied their most fundamental human rights. Meanwhile, incompetent and/or negligent policies of international financial institutions engulf these regions in debt through skyrocketing interest rates, and powerful Western governments and arms industries provide the diplomatic and physical means of oppression to corrupt and brutal regimes. These regimes, in Indonesia, Colombia and elsewhere, while enriching themselves, violently exacerbate the misery of millions of their poor, already plagued with malnutrition and unemployment.

Meanwhile the violent cycle between rebel groups that originally sought justice and corrupt state armies creates an atmosphere of all-out chaos where civilians are caught in the middle and often targeted directly. Violence becomes normalized as the purpose of war is mutated toward criminality and inequality expands.

Arms industries and military contractors generate notable profits while supplying high-wage jobs in high-tech Western industries and investors in the U.S and elsewhere also benefit. Yet millions suffer in the developing world as they are denied basic resources necessary for survival (which are plentiful in the world) and face the constant threat of indescribably horrific violence, cementing their oppressed existence multilaterally through dangerous unilateral policies and ideologies of the transnational power elite. The objectives of war have been seemingly altered throughout much of the globe, reflecting those which aim not to secure a means toward peace, but enable a perpetual state of conflict, maintaining the current global power structure. (Singer 2006:4) While the distribution of resources is becoming ever more skewed in favor of the world’s dominant powers, those within weak states, and seemingly even the most self-acclaimed ‘civilized’ of states, have become more neglectful of the global poor. Further exacerbating this global trend, rapidly growing technology has insofar enabled not the equitable dissemination of wealth and resources to a majority of the world’s inhabitants, but rather more efficient ways for groups to kill, plunder, and dominate entire societies. The main imperative of those of power must shift; only through the stabilization of present war-torn and decimated states can those such as the U.S secure indefinite peace for its populations, and, concurrently, the world.

Endnotes

1. "Bringing the Wicked to the Dock." In Griffiths, Robert J. 2007. *Annual Editions: Developing World* 07/08. Dubuque, IA: McGraw Hill.
- 2 Retrieved June 6, 2007 from www.globalmarchagainstchildlabor.com
3. Misol, Lisa. 2006. "Indonesia: U.S Aid to Corrupt TNI Risks More Rights Abuses." *The Jakarta Post*, March 14, 2005. Retrieved June 7, 2007 from www.humanrightswatch.org
4. Khor, Martin. "Debate hots up on IMF interest rate policy." *Third World Network* (date of publication not given) Retrieved July 25, 2007 from www.sunsonline.org/trade/other/MartinFMI-1.html-11k-
5. Unicef- The State of the World's Children 2000: Panel 2 – Indonesia's Despair www.unicef.org/sowc/archive/ENGLISH/
6. Unicef- Indonesia. Retrieved June 2, 2007 from www.unicef.org/infobycountry/
7. *Amnesty International Report 2007*: State of the World's Human Rights. Retrieved June 5, 2007 From <http://thereport.amnesty.org/eng/Regions/Asia-Pacific/Indonesia>
8. *Human Rights Watch* "Indonesia: Stop Abusive Forced Evictions of Urban Poor in Jakarta" (Jakarta, September 6, 2006). Retrieved June 6, 2007 from www.humanrightswatch.org
9. Shari, Michael. 1998. "Indonesia: What Did Mobil Know?" *Business Week*, December 28, 1998. Retrieved June 3, 2007 from www.meltingpot.fortunecity.com/albania/726/mobil2.htm; "Exxon Mobil: Human Rights Abuses in Aceh, Indonesia" March 2006. Retrieved June 15, 2007 from <http://www.laborrights.org/projects/corporate/exxon/>
10. Groth, Hendrik. 1998. "2.5 Million Children Forced to Work in Colombia" *The Deutsche Presse-Agentur*, Monday April 13, 1998. Retrieved May 30, 2007 from www.hartford-wp.com/archives/42/776/html
11. Herman, Edward S. Zarate-Laun, Cecilia. 1999. "Globalization and Instability: The case of Colombia" *Z Magazine*, September 1999. Retrieved June 19, 2007 from www.thirdworldtraveler.com/Latin_America
12. Kirk, Robin. 2001. *Generation Under Fire: Children and Violence in Colombia* Human Rights Watch 1/1/2001. Retrieved June 25, 2007 from www.humanrightswatch.org; White, Jonathan M. 2004. "Colombia: Children and War" UN Publications Division 2004. Provided by my mentor, Dr. White
13. Herman, Edward S. Zarate-Laun, Cecilia. 1999. "Globalization and Instability: The case of Colombia"
14. *The Colombia Poverty Report 2002*. The World Bank. Retrieved June 27, 2007 from <http://web.worldbank.org>
15. Herman, Edward S. Zarate-Laun, Cecilia. 1999. "Globalization and Instability: The case of Colombia"
16. *Human Rights Watch*. 2003. "You'll Learn Not To Cry"- Child Combatants in Colombia (Book) Retrieved June 25, 2007 from www.hrw.org/reports/2003/colombia0903/colombia0903.pdf
17. Comunidad Sagura. 1/11/2006. "Colombia: Where are the Paramilitary Children" Retrieved May 30, 2007 from www.crin.org/resources/find.asp?orderby=categoryname%20asc&pagelD=1000-23k-; Watchlist for Children and Armed Conflict. 2004. "Colombia's War on Children" Retrieved June 13, 2007 from www.watchlist.org/reports/files/colombia.report.php
18. "You'll Learn Not To Cry"- Child Combatants in Colombia 2003. (Book)
19. You'll Learn Not To Cry"...
20. "You'll Learn Not To Cry"...
21. "The New Face of Warfare" By Fatin Abbas. *The Nation*: May 10, 2007. Retrieved July, 2007 from www.thenation.org

22. Corporación Colectiva de Abogados Jose Alvear Restrepo. July 2, 2007. "Ruling on the La Rochela Massacre by the Inter-American Court of Human Rights: a Just Ruling for Justice" Retrieved July 11, 2007 from <http://www.zmag.org/content/showarticle.cfm?ItemID=13201>
23. Montero, David. Whalen, Kelly. November 2002. "Colombia – The Pipeline War" Retrieved July 6, 2007 from <http://www.pbs.org/frontlineworld/stories/colombia/corporate.html>
24. Montero, David. Whalen, Kelly. November 2002...
25. Human Rights Watch. 1998. "Colombia: Human Rights Concerns Raised By The Security Arrangements of Transnational Oil Companies (April 1998)" Retrieved July 6, 2007 from www.hrw.org/advocacy/corporations/Colombia/Oilpat.htm-25k-
26. Montero, David. Whalen, Kelly. November 2002. "Colombia – The Pipeline War."
27. The North Shore Colombia Solidarity Committee Blog. May 2007. "The Multinational Occidental Petroleum Company Ignores The Labor Rights of its Workers in Colombia" May 18, 2007. Retrieved July 6, 2007 from <http://northshorecolombia.blogspot.com/>
28. Muse, Tony. 2007. "U.S. Firms Thrive Off Colombia Drug War" The Associate Press, *World News Network*, June 16, 2007. Retrieved June 27, 2007 from www.Sun-Sentinal.com
29. WatchList on Children and Armed Conflict. February, 2004. "Colombia's War on Children" Retrieved June 13, 2007 from www.watchlist.org/reports/files/colombia.report.php
30. Muse, Tony. 2007. "U.S. Firms Thrive Off Colombia Drug War"...; "Colombia: Human Rights Concerns Raised by the Security Arrangements of Transnational Oil Companies (April 1998)
- 31 Mills, C. Wright. 1959. *The Power Elite*. New York: Oxford University Press. (Chapter 15)

Life Before Legal Status: The Experiences of Undocumented Immigrants

LA TOYA STAINE CARRIKER

LaToya is originally from Belize, Central America. Funded by an ATP grant, LaToya conducted this research on immigration under the mentorship of Dr. Lucinda King-Frode and Dr. Rebecca Leavitt, and presented it in April 2007 at the National Conference for Undergraduate Research and ATP Undergraduate Research Symposium. LaToya hopes that through the research she has conducted, people will have better clarity and understanding of immigrants' lives and will thus be inspired to effect policy changes.

Introduction

This research is a qualitative study to learn of the experiences undocumented immigrants have while living in the United States. I first became interested in this research after relocating to the U.S. three years ago. Although I was never undocumented, I encountered many challenges that exist when a person leaves a familiar country. According to Hutchison (2003), migrating to a new country is usually considered a major life event and turning point in the life of the immigrant. I often describe it as relocating to a new world. A person has to teach herself how to do menial tasks in the new environment. I then started questioning how much more challenging immigration would be for a person who is undocumented. As a social work student, I also questioned how people in helping professions address these challenges. Asking these questions eventually led to my research questions:

What experiences undocumented immigrants have had in securing resources to meet their basic needs and those of their families. Specifically,

- a. What basic resources undocumented immigrants most often obtain?
- b. Where and how are undocumented immigrants able to secure certain resources?
- c. How did prospective helpers help, or not?

What is the affective response and coping mechanisms that undocumented immigrants experience as a result of this process?

Research Background

Undocumented immigrants are often referred to as illegal or undocumented aliens or immigrants. For the purpose of this research, undocumented immigrants are described as persons who are unlawfully residing in the US. According to the Department of Homeland Security (2001), approximately 5.0 million undocumented immigrants resided in the US as of October, 1996. In 2004, the Center for Immigration Studies reported that the total number of undocumented immigrants in the U.S. may be as high as ten million (Becker, 2006).

Because undocumented immigrants continue to arrive in the U.S. in large numbers, U.S. government policies continue to focus on reducing and preventing illegal immigration. For example, the main purpose of the

Immigration Reform and Control Act in 1986 was to restrict large numbers of undocumented immigrants from entering the US by “sanction[ing] employers for hiring undocumented workers” (Williams, 2004, p. 11). The Personal Responsibility and Work Opportunity Reconciliation Act and the Illegal Immigration Reform and Immigration Responsibility Act are designed to dissuade immigrants from residing in the US by curtailing public assistance to immigrants (Fragomen, 1996). Another way the US government has tried to reduce illegal immigration is through border patrol at the U.S.-Mexican border. Illegally crossing the U.S.-Mexican border has proven detrimental and even fatal to many immigrants. Entering the U.S. at the Mexico/U.S. border usually means enduring extreme temperatures. Many undocumented border-crossers have died from severe weather conditions and heat stroke (Nagengast, 1998).

Along with official policies which aim to prevent illegal immigration, public intolerance of undocumented immigrants is still widely present. Many people have strong negative feelings about immigrants- especially undocumented immigrants. Proposition 187 in California in 1994, for instance, is a reflection of public reaction to undocumented immigrants. Residents of California voted for Proposition 187 which “deprives illegal immigrants of welfare benefits, education, and all but emergency medical care. It also requires that teachers, police officers, and welfare workers report any knowledge of illegal immigrants to the Office of Immigration and Naturalization Services for purposes of deportation” (Lee & Ottati, 2002, p. 618). Undocumented immigrants have also been forced to enter low paying, dangerous, and degrading jobs where they often receive little respect or protection. Despite such conditions, popular assumptions are that undocumented immigrants are a strain on the American economy and a threat to the American way of life (Williams, 2004).

Undocumented immigrants most often arrive and live in the US in inhumane and risky conditions. The aim of this research is to gain insight into the lives of undocumented immigrants living in the U.S. through interviews with former undocumented immigrants. In particular, the research focuses on the variety of experiences undocumented immigrants have had in securing resources to meet their basic needs and those of their families.

Methodology

Beginning in December 2006 the snowball sampling method was used in this research by asking personal contacts in school, work, and other social settings to share information on the research and the need for participants. After receiving the initial interest in participation, the investigator contacted the person to determine if the person was eligible for the research. Participation eligibility required a person to be twenty-one years

or older, a former undocumented immigrant, and a current resident of Massachusetts. If eligible, a time convenient to both the participant and the investigator was scheduled to conduct the interview. From January to March, 2007, interviews were conducted both in person and via telephone.

In a non-scheduled standardized method, both closed ended and open ended questions were asked. Some closed ended questions asked participants to share their demographics: age, race/ethnicity, and country of origin. Other closed ended questions asked participants to name which public assistance they have had or are currently receiving. Open ended questions asked participants to share different aspects of their experiences during the period they were undocumented. Because the interviews were conducted in a non-scheduled manner, some participants' explored certain topics more than others.

Sample

A total of eight participants from ages twenty-eight to fifty-eight years old were interviewed. Of the eight participants, two were males and six were females. Seven participants were undocumented while living in Massachusetts. The one other participant lived in New York during the period of undocumented status. Three participants were originally from Cape Verde, one from Angola, two from Ghana, one from Portugal, and one from Guyana. Participants have resided in the U.S. from seven to twenty-eight years but have attained legal status from three to twenty-six years. Although all participants spoke English, one participant requested a translator to better convey and understand messages. Figure 1 below provides background information on each participant.

Figure 1

Background information on participants.

Participant	Country of Origin	Age	Gender	Years residing in the US	Years with legal status
1	Ghana	35	M	7	5
2	Ghana	58	M	25	19
3	Guyana	46	F	28	26
4	Portugal	36	F	17	16
5	Cape Verde	31	F	17	7
6	Cape Verde	28	F	9	8
7	Cape Verde	30	F	12	3
8	Angola	56	F	10	9

Ethical Concerns

Because this research involves a possibly vulnerable population, ethical issues were thoroughly considered. Ensuring the privacy of the participants was essential since this research has the possibility of stigmatization. All information that could reveal a participant's identity was kept confidential. Also, to minimize harm to the participants, only persons who are now legal residents or citizens were asked to participate in the research.

Along with the above precautions, other measures were taken to ensure that the research was ethical. Participants, for instance, were asked to sign a letter of consent. Included in the letter of consent were the purposes of the research. Also, the informed consent included all possible risks known to the researcher, the benefits of participating in the research, and the contact information of the researcher. A research proposal was also submitted to the Institutional Review Board (IRB) at Bridgewater State College. The IRB ensured that the research met ethical standards, was well planned out and was worthwhile.

Results and Discussion

Source of Basic Survival Needs

As seen on Figure 2A on page 6, most participants relied largely on family, friends, and themselves to provide for housing, food, and income. Consistent with research by Chavez (1990), most participants co-resided as a means to thrive in their new environment. Some participants shared that co-residing not only brought financial assistance, but it also provided a means for emotional support. Unlike Chavez' research, however, a few participants noted that they had negative experiences co-residing. Some negative experiences shared were overcrowding, lack of privacy, and frequent tension or disagreements.

Except for medical assistance, this research shows that undocumented immigrants are less likely to use public assistance. These results are consistent with research by (UIC) Center for Urban Economic Development (2002). Their research found that although many undocumented immigrants have low or moderate incomes, they rarely relied on public assistance to support them. This research shows that they are much more likely to rely on family, friends, and themselves.

Figure 2A

Source of Basic Needs

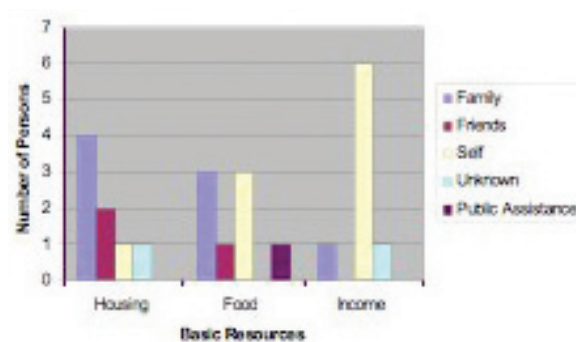
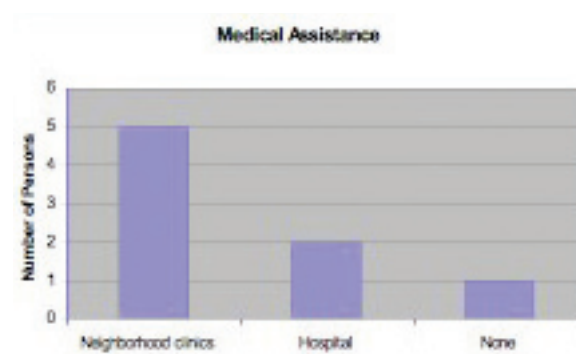


Figure 2B

Source of Medical Assistance



Affective Responses

Most participants disclosed having negative feelings during the period of undocumented status. When asked to list some descriptions of how they generally felt while undocumented, some common terms used were: lonely, disappointed, frustrated, angry, and sad. Only one participant said that she was contented with her situation. This person, however, also noted she came to the U.S. when she was sixteen years old and was cared for by an aunt. She got married the following year and thus became a legal citizen. Her period of undocumented status then is relatively short compared to the other participants.

This same participant also noted that she was never afraid of deportation. Six of the other participants stated that they were afraid of being deported. A few participants said that they so much feared being deported that it affected their social life. They avoided large gatherings, banks, and airport. One other participant said that being deported "never crossed [his] mind."

When asked to list some of their major stressors, most participants responded that not having a social security number was one of their major stressors. They stated that without social security numbers, they could not get better jobs, further education, and health insurance. Other stressors mentioned were language barrier, strenuous work, and lack of stability in their lives.

Participants were also asked to state some negative incidences that stood out to them during the time they were undocumented. One participant mentioned that she endured verbal abuse and constant belittling by her employer. Another participant stated that she was once mocked by a police officer while she struggled to speak English. A participant shared that she entered a romantic relationship on the hope that she would get married and attain legal citizenship. She stated that during this relationship she endured verbal abuse and once physical abuse on the hopes that one day she would be legal. Other participants stated that most negative incidences were the unsafe working conditions at the factories and the unfair pay by some employers.

Because participants' seemed to have very negative experiences while they were undocumented, they were asked if there were times that they wanted to return to their countries of origin. Six of the eight participants said that they did want to return. They explained that they missed the cultural practices and the familiarity of their countries of origin. These six participants were then asked what prevented them from returning to their native countries. Some stated that it was difficult for them to provide for themselves and their families. Some also mentioned that they could not advance in their native countries. Four of these participants had come to the US as high school students with the hopes of attending colleges. One other participant stated that she came to the U.S. as a minor and even though she wanted to return, her mother would not allow her to. Of the two participants who stated that they did not want to return, one was the woman mentioned earlier who obtained her legal documents a year after immigrating to the U.S. The other participant stated that she came from Angola where there was a civil war. She explained that she preferred living with the difficulties as an undocumented immigrant than to have her family continue living in a country with war.

Interesting Findings

Some very interesting observations were made from this research. Most notably, even though seven of eight participants described their experiences as highly stressful, none were seen by a professional counselor, social worker, or therapist! Participants provided some insights as to why they never sought professional counseling. For example, one participant explained that in her country of origin, the cultural expectation is to keep personal struggles and difficulties private. Two other participants stated

that in their native countries, professions such as counseling, social work, or therapy are nonexistent. They stated that they simply did not know such services in the U.S. Hence, even though these participants had highly stressful experiences, they never considered seeking professional therapy.

Other interesting findings are the difficulty in recruiting and the high level of distrust some participants and potential participants displayed. Some persons frankly stated that they were skeptical of speaking to the investigator or other persons about their experiences during the period of undocumented status. For example, one person asked "are you setting me up?" Two persons also discussed the New Bedford Raid¹ which occurred during the time period participants were being recruited and interviewed. One of the two persons asked what were the interviewer's thoughts and view of the raid. Others displayed skepticism by asking personal questions of the investigator. Most questions sought information on her cultural background, her legal status, and her educational background. Other possible signs that participants were skeptical were unreturned phone calls, unanswered phone calls, and non-attendance at arranged meetings.

Another interesting finding is that most participants expressed feelings of accomplishment and entitlement. Many stated that they are now proud of overcoming the circumstances that they had experienced. As one participant stated, "I have been at the bottom of the bottoms, and now I feel like I have earned my right as a U.S. citizen." All participants also shared a desire to assist persons who are now undocumented. Many stated that they do not want others to endure the hardships that they did. Participants offered suggestions which they believe could greatly assist current undocumented immigrants. Their suggestions are mentioned below.

Limitations

A limitation of this research is that only one interviewer (who is also the researcher) was used for this research. More interviewers may have possibly allowed for more participants. Another limitation is that all participants had a contact in the U.S. when they first arrived. If this research were replicated with participants who have no contacts, results may vary. Likewise, results may vary if this research is replicated with persons who are currently undocumented. This research is highly dependent on participants' recollection of past events and feelings.

1. The New Bedford Raid occurred on March 6, 2007 when "300 ICE [Immigration and Customs Enforcement] agents and other law enforcement officers raid[ed] the Michael Bianco Inc. factory on the New Bedford waterfront.... At least 300 workers who cannot prove they [were] in the country legally [were] detained. After initial screening at the factory in New Bedford, most of the workers [were] transferred to Fort Devens in Ayer for processing" (The Boston Globe, 2007).

Another limitation to this research is that one participant was undocumented while living in New York. It is possible then that her experiences are based on different policies and practices than those in Massachusetts. Similarly, this research has a wide range of time periods of participants' years of residency and legal status in the U.S. For example, one participant has resided in the U.S. since 2000, and another has resided since 1981. Attitudes, policies and practices changed over time and may affect their experiences.

One limitation of using the snowball sampling technique is that the research lacks a representative sample of undocumented immigrants living in Massachusetts. If, for example, more undocumented immigrant men reside in Massachusetts than women, this research does not reflect that since more women were interviewed. This is also true for other areas such as the age, the income, ethnicity, period of residency in the US, and national origin. However, given that the research seeks information from a vulnerable population and participation in research may be avoided by many, the researcher used whoever was readily available. Consequently, selection of participants according to specific variables like sex, ethnicity, and national origins was not practical for this research.

Another limitation of the research is that the researcher speaks primarily English. Although the majority of the participants conducted the interviews in English, a translator was used for a participant who felt more comfortable conveying messages in her native language. Even though using a translator allowed for a bigger and more diverse sample, it is more likely to have misinterpretation of messages. Also, because paying professional translators was not feasible for this project, an adult daughter of the participant translated the interview. Hence, there is a possibility that the participant shared less because her daughter was present. However, it is also possible that she shared more having someone she is comfortable with present.

Using two different interviewing methods may also affect the results of this study. As noted by Monette et al. (2005), "Lack of visual contact eliminates several desirable characteristics of personal interviews. The interviewer cannot supplement responses with observational information, and it is harder to probe effectively without seeing the respondent" (p. 183). Generally, this seemed to be true in this research as persons who were interviewed over the telephone shared less than those who were interviewed in person. Persons interviewed via telephone were also more skeptical of the investigator and asked more questions of the interviewer's cultural and educational background.

Research Implications and Future Research

The results of this research imply that: (i) contrary to the general public's view, undocumented immigrants rarely rely on public assistance. Instead, undocumented immigrants are heavily dependent on family members, friends and themselves to provide for their basic survival needs; (ii) despite highly stressful conditions, undocumented immigrants do not receive mental health services; (iii) undocumented immigrants have stressful experiences and negative emotions as a result of the lack of legal status. Given these findings, possibilities for future research and improved services are discussed below.

Many participants offered suggestions on what social service providers could improve on. For example, many stated that learning the common barriers could provide insight into the social and emotional challenges they face. Policies could then be made accordingly. Another suggestion is providing more outreach to the undocumented population. For example, making information on U.S. lifestyle and cultural practices easily accessible to immigrants is one way of reaching out to the population. Providing this information may also help immigrants learn more of mental health services.

Policies also need to be created to minimize risks to persons of undocumented status. For instance, there is a need for places that would serve as safe places for undocumented immigrants who are abused. As stated above, many undocumented immigrants may shy away from getting help for the fear of being deported. Thus, safe places need to be created to ensure the safety of persons. To reduce risks, national policies also need to be improved to provide for easier immigration. One current bill is the Comprehensive Immigration Reform Act which proposes a "path to citizenship" and legal protection of workers (Coalition for Comprehensive Immigration Reform (CCIR), 2005). Other policies could focus on the reasons people are immigrating. Many of the participants in this research stated that if not for economic or political difficulties in their countries of origin, they would have returned to their native countries. Thus, future policies need to address global trends that are driving people from their native countries. Developed countries such as the US may need to create better international policies geared towards economic advancement for developing countries.

It may be beneficial for future research to improve and build on this current research. As stated earlier, this research is exploratory in nature; thus, results cannot be generalized. Future research may want to use larger samples that are representative of the undocumented population. Also, it is important to note that a specific focus on undocumented immigrants and their mental health conditions should be addressed in future studies.

Works Consulted

- Becker, C. S. (2006). *Immigration and Illegal Aliens: Burden or Blessing?* Farmington Hills: Thomson Gale.
- Bhugra, D. (2004). "Migration and Mental Health." *Acta Psychiatrica Scandinavica*, 109 (4) 243- 258.
- Chavez, L. R. (1990). *Coresidence And Resistance: Strategies for Survival Among Undocumented Mexicans and Central Americans in The United States.* *Urban Anthropology* 19 (1-2) 31-59.
- Coalition for Comprehensive Immigration Reform* (2005, January). "CIR Backgrounder." Retrieved May 10, 2007 from http://www.cirnow.org/content/en/legislation_cir_backgroundunder.htm
- Department of Homeland Security* (2001). "Illegal Alien Resident Population." Retrieved February 13, 2006, from <http://uscis.gov/graphics/shared/statistics/archives/index.htm>
- Fragomen, A. T. (1996). "Welfare Bill Severely Curtails Public Assistance to Noncitizens." *International Migration Review*, 30 (4), 1087-1095.
- Hagan, J., Ebaugh, H. R. (2003). "Calling Upon the Sacred: Migrants Use of Religion in the Migration Process." *International Migration Review*, 37 (4) 1145-1162.
- Helfand, S. (2000). "Desensitization to Border Violence & The Bivens Remedy to Effectuate Systemic Change." *Berkeley La Raza Law Journal*, 11/12 (2/1), 87-122.
- Hutchison, E. D. (2003). *Dimensions of Human Behavior: The Changing Life Course.* Thousand Oaks: Sage.
- Khamphakdy-Brown, S., Jones, L. N., Nilsson, J. E., Russell, E. B., & Klevens C.L. (2006). "The Empowerment program: An Application of An Outreach Program for Refugee and Immigrant Women." *Journal of Mental Health Counseling*, 28 (1), 38- 47.
- Kurz, B., Malcolm, B., & Counoyer, D. (2005). "In the Shadow of Race: Immigrant Status and Mental Health." *Affilia: Journal of Women and Social Work*, 20 (4), 434-447.
- Leclerc, F. B., Jensen, L., & Biddlecom, A. E. (1994). "Health Care Utilization, Family Context, and Adaptation among Immigrants to the United States." *Journal of Health and Social Behavior*, 35 (4), 370-384.
- Lee, Y., & Ottati, V. (2002). "Attitudes Toward U.S. Immigration Policy: The Roles of In-Group - Out-Group Bias, Economic Concern, and Obedience to Law." *Journal of Social Psychology*, 142 (5), 617-634.
- Mehta, C., Theodore, N., Mora, I., & Wade, J. (2002). "Chicago's Undocumented Immigrants: An Analysis of Wages, Working Conditions," and Economic Conditions. Retrieved March 11, 2006 from University of Illinois at Chicago, Center for Urban Economic Development Web site: http://www.uic.edu/cuppa/uicued/Publications/RECENT/undoc_full.pdf

Monette, D. R., Sullivan, T. J., & DeJong, C. R. (2005). *Applied Social Research: A Tool for the Human Services* (6th ed.). Belmont: Thomson Brooks/ Cole.

Nagengast, C. (1998, November- December). "Militarizing the Border Patrol (Cover Story)." *NACLA Report on the Americas*, 32, 37- 41.

Paulino, A. (1998). "Latino Elders and the Twenty-First Century: Issues and Challenges." *Journal of Gerontological Social Work*, 30 (1/2), 61-74.

Pottie, K., Brown, J.B., Dunn, S. (2005). "The Resettlement of Central American Men in Canada: From Emotional Distress to Successful Integration." *Refuge* 22(2), 101-112.

Rivera-Batiz, F. L. (1999). "Undocumented workers in the labor market: An analysis of the earnings of legal and illegal Mexican immigrants in the United States." *Journal of Population Economics*, 12 (1), 91-116.

Smith, R. (1998, January- February). "Closing the door on undocumented workers." *NACLA Report on the Americas*, 31, 6-9.

Sullivan, M. M. & Rehm, R. (2005). "Mental Health of Undocumented Mexican Immigrants." *Advances in Nursing Science*, 28 (3), 240-251. *The Boston Globe* (2007, March 15).

Timeline of the New Bedford Raid. Retrieved May 10, 2007, from http://www.boston.com/news/local/articles/2007/03/15/timeline_of_the_new_bedford_raid/

Trevino, J. A. (1998). "Border violence against illegal immigrants and the need to change the Border Patrol's current complaint review process." *Houston Journal of International Law*, 21 (1), 85-86.

Williams, M. E. (2004). *Immigration: opposing viewpoints*. Farmington Hills: Greenhaven Press.

It's All in the Words: Determining the Relationship between Newspaper Portrayal of Rape Victims and Reader Responses

AMANDA FOUNTAIN

Amanda wrote this piece under the mentorship of Dr. Arthur Lizie with the funding of an ATP summer grant.

Abstract

In order to better understand the effect newspaper portrayal has on reader opinion, it is necessary to explore news framing and structure. This study investigated the relationship between newspaper portrayal, or framing, of rape cases and how that portrayal influences reader response and perception. To determine reader response, participants were asked to read one of three vignettes, each describing a rape with either a positive or negative description of the victim or assailant. This was followed by eight questions testing four factors: blame, responsibility, control and accountability. The results from the four factors illustrate the responses readers had for the story depending on the frame for the victim and the assailant. Ultimately, this study shows that portrayal does change reader response towards the victim and the assailant depending on the frame.

Introduction

Portrayal and description are part of the framing techniques used in news media. While news media must give all the facts in rape cases, an intentional news frame can have significant consequences on how readers perceive issues (Shen 401-402). A news frame is a structured description and portrayal of an event, which is created by the media with the intention of giving meanings to and shaping messages (Shen 400). This means that if a story is framed, the media has shaped the message, potentially changing the aspect or intent of the story. In rape cases, a frame that describes the victim unfavorably may cause readers to respond negatively toward the victim.

The purpose of this study therefore intends to determine if there is a relationship between newspaper portrayal of rape victims and readers response. When it comes to framing rape cases, newspapers must not only give all the facts for the story, but also portray the victim and assailant accurately. Framing becomes an issue because readers respond to the printed portrayal of the victim and assailant. If news media routinely portray rape victims negatively, it can result in readers misplacing blame and fault in the situation.

In reference for this study, rape is defined as a sexual violation, usually violent in nature and is committed against women. This study only examines women as the victim. Sexual violence includes unwanted sexual advances such as verbal, coercive, physical and sexual events (Young 41). The victim is defined as the woman claiming rape. Finally, the assailant is the person who is suspected of committing the rape.

To determine reader response, four factors, or variables, are tested: blame, responsibility, control and accountability. Through these factors, reader response is illustrated as these variables combine to show fault in the situation. Identifying a rape victim within a news frame associates her with a violent crime. Amy Wang explains that past newspaper portrayals of a rape victim caused one victim to become a gossip item rather than a true victim; reports on her numerous affairs caused a morality debate over whether or not she deserved her fate (12). When personal information becomes available, the news frame may reflect the impression that the victim said or did something to deserve the rape, resulting in readers attacking her character.

This research is important because it will show how framing in rape cases can change readers' opinions of the victim. This change occurs more often when the frame interacts with a reader's existing perceptions (Shen 402). When the frame includes a negative description of the victim, the more likely it becomes that reader opinion will also be negatively effected. This effect is that the reader no longer perceives the victim as a victim, but rather that she lied about being raped, secretly enjoyed it, or even "asked" for it (Buddie 140); the reader believes the victim is at fault and becomes the target of scrutiny.

These results are beneficial in learning how to give a balanced and representative coverage of rape in newspapers to inform the public about the issue (Berrington 318). In addition to this, rape stigmatization can be dispelled once it is understood how negative stereotypes and perceptions of victims and rape form and change (Nagel 735). The effects of news framing on reader response will allow for an understanding of how to accurately portray a rape case without misplacing fault.

Review of Literature

In order to further discuss news framing in the sense of rape cases, first framing must be discussed, and then previous studies determining the relationship between newspaper portrayal of rape victims and reader opinion must be examined. Newspaper framing and portrayal of rape cases can be influential in causing a reader to perceive the victim and the assailant in different ways. This means that it is the portrayal, not just the facts of the case that determine how a reader reacts to the parties involved. These portrayals can lead to reader bias for either the victim or the assailant; hence newspaper portrayal should accurately describe both parties to avoid inaccurate perception.

News frames suggest how readers should view events and issues; reporters frame news through a process of selection, emphasis, exclusion, and elaboration which results in narrowing the frame and thereby narrowing readers' views of those events and issues (Hendrickson 39). The selection of certain facts and excluding

other information creates a frame that impacts public opinion and reader interpretations of issues and events (Shen 400). Framing therefore is the process of selecting information in order to define issues for readers, rather than relying on a more detached model of journalism (Aday 769).

Newspaper portrayal of rape victims can lead to different perceptions of the event in the way that they are framed. Societal beliefs that men are supposed to be aggressive, while women are to be passive are furthered by media representations; according to Basile, "sexual attitudes, behavior, and expectations are also learned, and this dichotomy of male/female behavior is reproduced in the media, with books, movies and television programs that romantically depict these scripted relationships between the sexes" (1041).

There are many aspects journalists need to consider when reporting rape victims, such as truth telling responsibilities, keeping professional standards, whether or not the right intentions are behind the story, and if the story will cause harm (Brislin 213-214). It is not only the legal liability that determines the structure of the story, but also from the need to sell papers; "For example, decisions about what to include on local television broadcasts emerged from an intersection of traditional news values and a need to earn profits in competitive industry" (Worthington 12).

News framing for the purpose of selling a story ultimately shapes reader response. In a study conducted by Nancy Worthington, she concluded that "the framing of the nine stories about campus sexual assault scandal demonstrates how journalistic and market priorities often intersected to create constraints" (8). Her study shows that framing can often limit how much information a news source will or can use; in rape cases this become influential because those constraints may lead a reader to a perception that was unintended. The media indeed influences perceptions of society in the ways that certain themes, such as rape are depicted, while other themes are marginalized (7). It is through these representations of women and sexual violence that negative views of women are constructed and reinforced (Berrington 309).

The problem with newspaper portrayal of rape victims continues in that "reporters may construct accurate and...sound articles but still miss the point of the event, thereby reinforcing stereotypes and public misunderstanding" (Byerly 62). In addition, crime victims faced social stigma caused partly by the perception 'that victims did or said something that in some sense contributed to their being harmed'" (Johnson 209). These constructed views of women lead to reader perception that she herself is the cause of the harm; her behavior was the reason she was raped.

Specific discourse used to describe events is the basis for news framing. Rape depictions in media show that the specific “rape discourse in news often suggests that such crimes are culturally appropriate gender behavior, often precipitated by female provocation” (Worthington 6). Careful consideration must be placed on discourse when framing a story. The meaning of words and language is highly influential when describing a rape case. According to Berrington, language is central in defining violence and cannot be underestimated; the need to be critical of the language describing male violence against women because the male perpetrator remains hidden, and the language fails to identify the consequence of violence and oppression for women (308).

Newspapers, as a medium for public information, must make sure the public understands the situation in a rape case, and avoid inaccurate portrayals. When newspapers print victims’ names, there is often a negative stigma associated with the crime, where blame is placed on the victim (Lake 111). The personalization of naming the victim only increases the focus on behavior and past experience and suggests that “some are ‘innocent victims’ while others precipitated their own attacks through their choice of attire or behavior” (Worthington 8). These two instances illustrate that newspapers must be critical in framing stories in order to avoid misunderstandings about the victim.

Much of the perception comes from previous false beliefs about rape and rape victims. The beliefs become accepted rape myths, where “a victim is blamed more for her victimization when she has had previous sexual experiences, which seems related to the stereotype that certain types of women ‘ask for it’ by being promiscuous,” (Buddie 140). The suggestion by journalists that women provoke rape by dressing or behaving in certain ways illustrates that the organizational constraints and journalistic values interact with each other, causing news that perpetuates rape myths, instead of eliminating them (Worthington 6). These false beliefs are significant because if readers believe rape myths, and newspapers highlight promiscuity or unacceptable behavior, can result in readers perceiving the victim inaccurately.

Even while “feminists have insisted on dismantling the categories of ‘good’ and ‘bad’ victims that have dominated common sense (and media) definitions of crime” (Cuklanz 308), it is the description of the victim’s history that influences the story and the consequent perception. “Women who reject patriarchal norms around ‘appropriate behavior,’ find themselves blamed if they become victims of male violence. By stepping outside their prescribed role, they place themselves at risk” (Berrington 309); their move outside social or feminine “norms” are the root cause of their victimization (309).

Readers tend to view rape cases based on circumstances, and “in conceptualization, it also seemed likely that the form of victim identification would affect readers’ views” (Johnson 68). The result from these different depictions is that readers don’t have any consistent negative or positive opinions of rape victims, since reader perception is based on how newspapers portray individual victims. However in a study examining ten rape cases, “the nature of media coverage of rape cases that occurred between 1980 and 1996 blamed the victims for the rape more often than the offender” (Ardovini-Brooker 13). This is mostly because newspapers depict female victims “in extremely negative terms: as sexually available, not respectable and not believable” (Los 309). So even while stories may be constructed based on individual circumstances, blame is more often placed on the victim rather than the perpetrator.

Newspaper portrayal of rape victims should be more consistent and depict the case without causing undue and unnecessary harm to the victim. News representations of rape victims should refrain from portraying the victim as though she were to blame for her attack. This is not to say that the perpetrator should be depicted as a monster, but that news stories should be accurate and fair in the portrayal of both parties. “Individual journalists may find opportunities to exercise agency in ways that can produce progressive news representations” (Worthington 12); being progressive and avoiding framing that causes the victim harm can still accomplish a fair and accurate story.

Method Participants

Participants consisted of 127 undergraduate and graduate students enrolled in summer session courses at a mid-sized northeastern college. The classes were randomly chosen core requirement courses. This convenient sample was selected because it gave a broader participant base which allowed for a wider sampling of media consumers.

Design

An experimental survey design allows for the survey to have specific parameters and to limit readers’ responses. The survey was comprised of three separate vignettes with eight questions responding to the vignettes. Half of the questions test responses for the victim, and the remaining questions test responses for the assailant. The responses were coded using a Likert-scaled with degrees of “Not at all,” “Very little,” “Somewhat,” and “Very much.” For each vignettes four factors were tested: blame, responsibility, control and accountability.

The first vignette is the control variable describing the events of the rape and supplying relevant and balances information about the victim and assailant. Only facts from the rape and some character

quotes were included. This control focuses on the actions and outcome, instead of the two people involved. The second vignette only has unfavorable descriptions of the victim. This vignette discredits the victim by making her appear provocative; according to one study, credible rape victims appeared clearly upset (Buddie 143), rather than calm and in control of her emotions. Finally, the third vignette has an unfavorable description of the assailant. The victim is described more favorably than in the second vignette. The negative description and portrayal of the assailant indicates that he already has a violent history and makes the victim appear even more innocent in the situation.

These vignettes are used to evaluate how rape differs in attributions of blame and responsibility (Simonson) according to reader response. Additionally, this study evaluates control and accountability in the situation. The vignettes are coupled with eight questions and are called Survey 1, Survey 2, and Survey 3. The questions for each survey remained the same, regardless of the vignette being used.

Procedure

Surveys were distributed, with permission from the class professor, to students at either the beginning or end of class time. After informing students that the survey was voluntary and confidential, informed consent was obtained by students' willingness to take the survey. Participants were told that the study involved news portrayal of rape and how readers respond to the portrayal. They were asked to read the vignette and answer the eight questions that followed. Each class had only one of the three surveys distributed; participants only saw one survey. Once participants completed the surveys, they were collected.

Results

Survey 1

The victim has a 59% "Not at all" blame score, while the assailant has a 61.5% "Very much" blame score. The victim's responsibility scores sloped down from 46.2% (Not at all), 33.3% (Very little), 12.8% (Somewhat), and 7.7% (Very much). The assailant however, has a 69.2% "Very much" responsibility score, which is more clearly defined. Only 15.4% of the readers feel the victim had no control over the situation. Continuing, the victim has scores of 46.2% (Very little), and 35.9% (Somewhat) for control. The assailant has a 73.7% "Very much" control score. The assailant has an 88.1% "Very much" score for accountability, and 44.7% indicated the victim was "Not at all" accountable for her actions. The scores continue with a downward trend of 23.7% "Very little," 18.4% "Somewhat," and 13.2% "Very much" (13.2%) scores.

Survey 2

The results for Survey 2 are spread out across all four values. The first factor, blame, has a 31% "Very little," and a 42.9% "Somewhat"

blame score for the victim and only 16.7% "Not at all". The assailant has a similar "Somewhat" responsibility score of 48.8%, although the "Very little" score of 14.6% is much lower. The responsibility score peaks and dips for the victim moving from 26.2% (Not at all), down to 16.7% (Very little), up towards 47.6% (Somewhat), and then back down to 9.5% (Very much). Once again, the assailant's responsibility score is 45% "Somewhat," but only 32.5% "Very much." The control factor for the victim is focused in the middle values with 33.3% "Very much" and a 42.9% "Somewhat" score. Meanwhile the assailant has scores focused on the last two values, "Somewhat" (34.1%) and "Very much" (53.7%). The accountability factor for the victim is focused on the final two values with 39% "Somewhat" and 26.8% "Very much" score. The assailant's score is also focused on the last two values of "Somewhat" (28.2%) and "Very much" (53.8%).

Survey 3

Results for Survey 3 have mostly opposing scores for victim and assailant. The blame score for the victim is 62.2% "Not at all," but also has a 20% "Somewhat" score. The assailant has a similar "Somewhat" score (20.5%), but a 77.3% "Very much" score. Continuing with responsibility, the victim had a 68.9% "Not at all" score, while the "Somewhat" and "Very much" scores for the assailant were exactly the same (20.5% and 77.3%). The victim's scores for control are closer towards the middle values with 44.4% "Very little" and 28.9% "Somewhat." The assailant however, has a high "Very much" score (65.9%) for the control factor. Finally, the accountability scores show the most opposing scores for victim and assailant with 64.4% "Not at all" for the victim, and 88.6% "Very much" for the assailant.

Discussion Overview

These results show that while readers felt the assailant was overall at fault in each vignette, the portrayal, or news frame, changed the degree each of the four factors were chosen. This is true not only for the victim but the assailant as well. By first looking at each survey individually and then in comparison to one another, the connection between news frame and reader response becomes clear.

Survey 1

Survey 1 is the control survey, and as such is balanced in favor for victim and assailant. More than half believe the victim should not be blamed, and even more believe the assailant should be blamed. None of the responses indicate the assailant to be blame-free, further showing that readers believe the assailant to be at fault, rather than the victim. Responsibility is slightly different however, in that there is a staggered score for the victim, and a more clearly divided score for the assailant. Responsibility is a more difficult measure in rape cases, since readers indicate that the victim, although not to blame, shares some part of the

responsibility. The results for the control factor are similar to responsibility in that there is a clearly defined one-sided score for the assailant, and a more varied victim score. Readers feel the victim had some degree of control over what happened, even if only a small degree; the victim could have done something to avoid being raped. Responsibility and accountability scores for the victim are similar which implies that readers associate these two values with one another.

Survey 2

Survey 2 is more favorable in description for the assailant and discredits the victim. One noticeable aspect was that for each factor, the scores for both victim and assailant fell more towards the middle values of “Very little” and “Somewhat” rather than the opposing “Not at all” and “Very much” values. Reader response therefore indicates that both the victim and assailant are equally blamed; the victim is as much to blame as the assailant. Responsibility also has similar scores for both the victim and the assailant; there is an equal amount of responsibility for both victim and assailant.

Results for the control factor again illustrate a significant indication that the victim had control in the situation. Responses for the victim fell in the “Very little” and “Somewhat” values, with a higher “Very much” score compared to Survey 1. Readers believe the victim had a significant degree of control over the situation.

Survey 3

Survey 3 was written to show a clear bias against the assailant. Subsequently, the results show a polar difference in the scores for the victim and assailant. The portrayal is therefore influential in that reader response reflects a clear bias between the victim and assailant. More than half the readers feel that the victim should not be blamed at all, and more than three quarters felt the assailant was very much to blame. More than half the readers feel the assailant was very much in control, but the victim placed herself in the situation and therefore had some degree, even if a very small degree, of control. The majority of readers feel that the victim should not be held accountable for her actions. While the victim is not blamed, responsible or held accountable, readers feel as though she was able to control the situation.

Reader Comments

Throughout the survey period, comments that had been written or stated verbally about the surveys were examined. Some of these comments were directed at the vignette itself, while other focused on the questions. Most comments pertained to there not being enough information included about what had truly happened to make judgments. The comments that were left mostly pertained to the assailant’s role, indicating that there

was enough information to make a decision and judgment for the victim, but not for the assailant; if more information were available, the answers may change. More information could change the reader’s response in either direction for this survey.

The control factor had the most varied responses however. Regardless of the situation, readers felt the victim had some degree of control. The description each time placed the victim voluntarily at the party where the rape occurred, indicating that she chose to be at that location. While she may not have had direct control over the assailant, she could have avoided the situation, being at the party, and therefore have avoided the outcome.

Conclusion

The results of this survey indicate that newspaper portrayal, or framing, of rape cases does affect reader response. In each survey, the assailant continuously had a higher rate of blame, responsibility, control and accountability. However, response was still affected by the portrayal as reflected through the diverse victim scores. When the victim was portrayed negatively, her scores were higher for each of the four factors in comparison to the control survey. The same is true for the assailant; his scores were also higher when he was portrayed negatively in comparison to the control survey. These results are consistent with previous studies stating portrayal and framing influence reader response. News framing is effective in being able to persuade readers to respond in different ways. In rape cases, the framing should reflect the material facts of the case. The control survey had the most readers responding that they needed more information in order to make a decision; an unbiased frame allows media to further investigate and provide evidence on rape cases.

Newspaper portrayal of rape victims does affect reader response. Being able to understand how the framing of a story causes the response will help to more accurately describe a story without misplacing fault. Accurate and unbiased stories are more effective because they engage readers to prompt for more information before making blanket judgments on the situation. This study can be furthered by breaking down participants into more specific groups such as gender, and age. Also, making the vignettes more closely aligned to each other and focusing on specific words instead of adding additional information for each one will further show the nuances of framing and portrayal.

Works Cited

- Aday, Sean. "The Framesetting Effects of News: An Experimental Test of Advocacy Versus Objectivist Frames." *Journalism and Mass Communication Quarterly* 83.4(2006): 767-784.
- Ardevini-Brooker, Joanne and Susan Caringella-MacDonald. "Media Attributions of blame and sympathy in ten rape cases." *The Justice Professional* 15(2002): 3-18.
- Basile, Kathleen C. "Rape by Acquiescence." *Violence Against Women* 5.9(1999): 1036-1058. Reprinted in CRJU 371: *Sex Crimes*, Spring 2007. Richard Wright. XanEdu CoursePack. National Archive Publishing Company: 2006.
- Berrington, Eileen and Helen Jones. "Reality vs. Myth: Constructions of Women's Insecurity." *Feminist Media Studies* 2 (2002): 307-323.
- Brislin, Tom. "'Just Journalism': A Moral Debate Framework." *Journal of Mass Media Ethics* 7 (1992): 209-219.
- Buddie, Amy M. and Arthur G. Miller. "Beyond Rape Myths: A More Complex View of Perceptions of Rape Victims." *Sex Roles* 45 (2001): 139-160.
- Byerly, Carolyn M. "An Agenda for Teaching News Coverage of Rape." *Journalism Educator* 49 (1994): 59-69.
- Cuklanz, Lisa M. and Sujata Moorti. "Television's 'New' Feminism: Prime-Time Representations of Women and Victimization." *Critical Studies in Mass Communication: a publication of National Communication Association* 23.4(2006): 302-321.
- Hendrickson, Laura J. and James W. Tankard, Jr. "Expanding the News Frame: The Systems theory Perspective." *Journalism and Mass Communication Education* (1997): 39-46.
- Johnson, Michelle. "How identifying rape victim affects readers' perceptions." *Newspaper Research Journal* 20 (1999): 64-80.
- Johnson, Michelle. "Of Public Interest: How Courts Handle Rape Victims' Privacy Suits." *Communication Language and Policy* 4(1999): 201-242.
- Lake, James Burges. "Of Crime and Consequence: Should Newspapers Report Rape Complainants' Names?" *Journal of Mass Media Ethics* 6(1991): 106-118.
- Los, Maria. "Selling newspapers or educating the public? Sexual violence in the media." *Canadian Journal of Criminology* (1997): July.
- Nagel, Barbara, Hisako Matsuo, Kevin P. McIntyre, and Nancy Morrison. "Attitudes Toward Victims of Rape: Effects of Gender, Race, Religion, and Social Class." *Journal of Interpersonal Violence* 20(2005): 725-737.
- Shen, Fuyuan. "Effects of News Frames and Schemas on Individuals' Issue Interpretations and Attitudes." *Journalism and Mass Communication Quarterly* 81.2(2004): 400-416.
- Simonson, Kelly and Linda Mezydlo Subich. "Rape perceptions as a function of gender-role traditionality and victim-perpetrator association." *Sex Roles: A Journal of Research* 40.7-8(1999): 617(1).
- Wang, Amy. "A Rapid Journey from Victim to Vixen." *American Journalism Review* 19(1997): 12-13.
- Worthington, Nancy. "Negotiating News Representations of Rape; Reporting on a College Sexual Assault Scandal." *Media Report to Women* 33(2005): 6-13.
- Young, Stacey L. and Kathryn C. Maguire. "Talking about Sexual Violence." *Women and Language* 26(2000): 40-52.

The Chivalry Hypothesis & Filicide: Are There Categorical Differences between Mothers & Fathers who kill their Children?

MEGHAN CHASE

Meghan is a senior majoring in Criminal Justice with a minor in Psychology. Her research was made possible by the Adrian Tinsley Summer Research Grant program for undergraduate students. Meghan's research project was initiated by her professor and advisor, Dr. Richard Wright. Dr. Wright provided support and encouragement by acting as Meghan's mentor throughout the research process. Mrs. Chase presented her research at the annual meeting of the American Society of Criminology in Atlanta, Georgia this past November. Meghan plans to attend graduate school for either law or criminal justice.

Filicide, (not to be confused with neonaticide or infanticide), is the killing of a child, male or female, by their mother or father (Laporte et al, 2003). Filicide has been a problem in virtually every culture at one time or another (Meyer & Oberman, 2001). In discussing filicide it is critical to explore the scope of the problem.

In 2005, approximately 1,460 children died due to child abuse or neglect. The rate of child fatalities was 1.96 deaths for every 100,000 children. Over 40 % of child fatalities were caused by neglect, although, physical abuse was also a critical factor in child fatalities. It is estimated that 76.6% of children who perished due to child abuse and neglect were younger than four years old. Sadly., 80% of the time, the perpetrator is one of the child's parents (Administration for Children and Families, 2005).

There are several common factors found in mothers who commit filicide. These characteristics include: a history of domestic abuse, suicidal ideation, substance abuse, unmarried status, young age, and low socioeconomic status. In addition, there are especially high rates of depression and psychosis in women who commit child homicide. The majority of women who commit maternal filicide do so due to a mental illness. Often times, there is also a previous history of abuse of the child (Freidman et al, 2005).

Unfortunately, studies are not definitive in the relationship between mental illness and maternal filicide because elements and characteristics that are related to maternal filicide differ in women who do not suffer from psychosis. Therefore, there is no concrete way to determine who will commit maternal filicide. Research has determined who is at risk to do so. Another reason it is difficult to understand why a mother would participate in maternal filicide is because many of these cases are filicide-suicide, in which case psychiatric and prison samples can't be used (Friedman et al, 2005). It isn't uncommon for a woman to suffer from depression and/ or psychosis post child-birth.

The chivalry hypothesis is a term coined by criminal justice scholars. Chivalry suggests that women who commit crime are awarded more lenient sentences than males who commit crime. One possible reason for the lenient sentencing is that women are generally viewed as the caregiver, or the loving mother. Another common stereotype is that women are emotionally "too weak" to commit violent crimes (Grabe, Trager, Lear, & Rauch, 2006). This study examines if and how the chivalry hypothesis affected five cases of filicide.

Over the past few decades, there have been studies that support and oppose the chivalry hypothesis. Those that support the hypothesis suggest that focusing on indirect aggression is causing society to refuse to recognize females' congenital ability to be physically aggressive (Pearson, 1997). Some argue that it is the type of offense rather than the severity of the offense that causes women to receive lesser sentences (Grabe, 2006).

Generally, women express aggression indirectly. For example, they gossip, spread rumors, name call, and ostracize their peers to cause both mental frustration and emotional damage. Is focusing on indirect aggression causing society to refuse to recognize females' congenital ability to be physically aggressive? (Pearson, 1997).

Margaret Farnworth and Raymond Teske, Jr. propose that there are two main causes for gender disparity in criminal justice proceedings: selective chivalry and differential discretion. Selective chivalry suggests that criminal justice officials knowingly permit disproportionate sentencing to white females. Differential discretion implies that chivalry is only used during informal decisions, instead of at more crucial stages, such as final sentencing (Farnworth & Teske, 1995).

Selective chivalry is based on the idea of the female stereotype. Females are seen to be more fragile, polite, and far more gracious than males, implying that women are to be held less accountable for their actions because they don't know how to properly control their emotions, nor are they able to withstand any severe punishment. Farnworth & Teske also suggest that the reason for gender disparity in sentencing is because judges and prosecuting attorneys view the female offender the way they would a female relative (1995). Therefore when a woman commits a crime, it is only "right" that a judge or a prosecuting attorney *selectively* chooses when to apply chivalry during criminal proceedings (Farnworth & Teske, 1995).

However, if a woman deviates from the normal female stereotype of the "non- aggressor", by participating in a violent crime, they are more likely to receive a severe sentence and chivalry is less likely to be included when making a sentencing decision. This is known as the typicality thesis of the chivalry hypothesis. The female not only gets punished for committing a violent offense, but for failing to behave as a woman is expected (Farnworth & Teske, 1995).

Differential discretion predicts that chivalry is used disproportionately during the beginning stages of criminal proceedings. The reason being is that the beginning stages of a trial are less formal, therefore, depending on the type of offense, the prosecuting attorney will generally reduce the charges or dismiss the case (Farnworth & Teske, 1995).

Essentially, the type of offense, the charge, gender, race-ethnicity, and age all contribute to gender disparity in court proceedings. For example, both gender and race predict whether or not an offender is more likely to receive a charge reduction, regardless of previous criminal history or age. Depending upon charge reduction, there may also be gender disparity in final sentencing (Farnworth & Teske, 1995).

Furthermore, African-American females are more likely to receive a charge reduction than African-American males. Males who aren't awarded a charge reduction are more likely to be sentenced to prison than women who aren't awarded a charge reduction (Farnworth & Teske, 1995).

Similarly, a female who is granted a charge reduction has a higher chance of receiving probation than a male who is also granted a charge reduction. The pattern continues to exist as far as age, and previous criminal history are concerned, in which females are always more likely to receive a lenient punishment, including African-American females (Farnworth and Teske, 1995).

However, African-American males suffer most, being least likely to be granted a charge reduction. Of all groups, females have the greatest probability to receive a reduction charge. However it is race, not gender that is the greatest predictor of whether or not charges would be reduced. Ultimately, the chivalry hypothesis is more complex with many variables contributing to sentencing disparity in criminal justice proceedings (Farnworth & Teske, 1995).

Other studies speculate as to whether or not the gender of the presiding judge plays a role in gender bias and sentencing. The 14th amendment requires equal protection under the Constitution. Therefore it is critical to determine whether the gender of the judge influences how an offender is going to be sentenced. If the punishment is going to vary based upon the sex of the judge, then ultimately it may be violation of the 14th amendment (Coontz, 2000).

Social psychologist Carol Gilligan suggests that there is a reason for why male and female judges sentence differently. Gilligan insists that men solve issues based on a justice perspective, and women solve issues based on a care perspective. Essentially, men tend to "define themselves" (Coontz, 2000) based on individual status and achievement, in turn causing male judges to make their decision based upon abstract reasoning and principles. On the other hand, female judges tend to focus on their interpersonal relationships with others, therefore they resolve moral disputes based on emotional responses and care in order to avoid causing stress to anyone involved (Coontz, 2000).

There are numerous reasons as to why male and female judges have discrepancies interpreting the same “factual matters” (Coontz, 2000). Personal experience, ethnicity, socioeconomic status, and race are all contributing factors to the irregularity in sentencing by men and women. The judge’s decision will also be different depending upon the type of case they are dealing with. If women are more affected by family matters as Gilligan suggests, then a family court case may be more relevant to gender disparities in sentencing than a criminal court case (Coontz, 2000).

Williams, Simon and Landis’ 1991 study concluded that women were less likely than men to be convicted of a crime. However other researchers found that females only receive lenient treatment during the sentencing stage, not during guilt and innocence phase (Williams, 1999).

Homicide studies conducted by Mann indicate that less than half of women who were arrested for murder in 1996 received a prison sentence, also receiving a six and a half years less than males arrested for the same offense. A similar study was conducted by Curran in 1983 when assessing the role the chivalry hypothesis played in felony cases. Curran studied “gender effects on negotiations, prosecution, and conviction, and severity of disposition” (Williams, 1999). Curran concluded that males were treated equally for negotiations, prosecution, and conviction. However they did receive more severe sentences than their female counterpart (Williams, 1999).

Williams (1999) insists that judges use their discretion by applying different variables to different types of sentencing. For instance, when dealing with females, prior criminal history determines whether or not a woman will receive probation. If she does receive probation, it also determine what the length of her sentence will be (Williams, 1999). On the other hand, when handling male offenders, Williams found that in addition to criminal history, bail status was also taken into consideration before and when probation was granted (1999).

It is important to note that race, which is, or is at least supposed to be an insignificant factor, is applied to females and not to males when considering incarceration (Williams, 1999). Moreover, Williams’ findings contradict several other studies by saying that white women had a higher incarceration rate than non-white women.

However another reason for this could be because the white women who participated in the study committed more felonies than the non-white women. In conclusion, legally relevant factors were used to determine sentencing and sentence length for both male and female offenders; however, they weren’t reinforced as strictly in regards to females (Williams, 1999).

A related area of concern in gender biased sentencing is that of capital punishment. In 1972, the Supreme Court in *Furman V. Georgia* determined that the death penalty was a violation of the 8th and 14th amendment. In 1976, in *Gregg V. Georgia*, the Supreme Court held that capital punishment did not always violate the 8th and 14th amendment as long as certain standards were met. There is substantial evidence indicating that there are far more men than women who are sentenced to the death penalty (Reza, 2005).

Between the years 1973 and 2002 there were 859 individuals who were executed. Of that 859 only 10 were female, accounting for 1.2 % of women. This means that 98.8% of people executed are males. Moreover, in 2002 there were 3,557 inmates on death row, 51 of them were women, which is only 1.4% of females, and 98.6% of men (Reza, 2005).

There are several explanations as to why the number of men executed far exceeds that of women. As discussed previously, the chivalry hypothesis suggests that women aren’t sentenced to death as often as men because they are seen as emotionally weak and therefore are less responsible for their actions. The “evil woman” theory suggests that a woman is punished due to the fact that the crime she committed was violent and heinous, and contradictory to how society believes a woman should behave. Statutory bias implies that the reason more men are on death row than women is because the statutory capital punishment law is not gender neutral, although it is intended to be (Reza, 2005).

In 2005, women accounted for 22% of homicides committed and murder arrests combined. In death penalty cases, both aggravating and mitigating factors play a role in the defendants’ sentence. Therefore, if men are “inherently more evil than women”, and women are viewed as none other than self-righteous, loving human beings, then such factors may “inherently encourage capital punishment for male defendants” (Reza, 2005). When aggravating and mitigating factors intersect with a gender bias theory, such as the chivalry hypothesis, it makes it “highly probable that most women will never see the inside of death row” (Reza, 2005).

By examining five diverse case studies, my research assesses whether or not the chivalry hypothesis may have influenced the perpetrator’s sentence.

Andrea Yates:

On June 20th, 2001 Andrea Yates drowned her five children in the bathtub of her home. Yates pled not guilty by reason of insanity. On March 12th, 2002 a jury concluded that she was guilty and Andrea was sentenced to life in prison.

However, due to false testimony by psychiatrist Dr. Park Dietz, the verdict was overturned and Andrea was awarded a second trial. Yates' second trial began on June 26th, 2006 and a month later on July 26th, a jury found her not guilty by reason of insanity and sentenced her to life in North Texas State Hospital's maximum security campus in Vernon, Texas.

Although Andrea Yates had no previous criminal history, it is critical to recognize her extensive history of mental illness. Andrea Yates was first hospitalized on June 17th, 1999, after overdosing on Trazodone, a psychoactive drug that was prescribed to her father. Yates was diagnosed with "major depressive disorder, single episode, severe" (O'Malley, 2005). A psychiatrist prescribed Andrea an antidepressant and she was released from the hospital seven days later on June 24th (O'Malley, 2005).

Not even a month later Andrea was hospitalized a second time after she attempted to slice her neck with a knife on July 20th, 1999. Andrea's diagnosis was "major depressive disorder, severe, recurrent, with psychotic features; rule out schizophrenia" (O'Malley, 2005). Andrea was prescribed the antipsychotic drug Zyprexa, which she would flush down the toilet.

It was noted by Andrea's doctors that her symptoms consisted of both "audio and visual hallucinations" (O'Malley, 2005). Yates' also admitted that "she'd had her first 'vision' when Noah was born" (O'Malley, 2005). Andrea envisioned herself stabbing Noah with a knife. According to her doctor, Andrea appeared to have been suffering from post-partum psychosis, which threatens not only the health of the mother, but the child as well (O'Malley, 2005).

After recognizing Andrea's symptoms, her doctor prescribed Haldol Decanoate, an injectable antipsychotic medication. In addition, Yates was also prescribed two anti-depressants, Wellbutrin XR and Effexor XR. These medications appeared to benefit Andrea. Her husband, Rusty Yates, said he felt like he "had his wife back" (O'Malley, 2005).

Andrea's anti-psychotic medications seemed to be working so well that she informed her doctor that she would be coming off the medication so that she could have another child. Her doctor warned her that if she stopped taking her injections of Haldol Decanoate that future psychotic episodes were likely to occur. Andrea ignored the warning and in November of 2000, she gave birth to her youngest child, Mary. Three months after Mary's birth, Andrea Yates' father passed away, causing Andrea to tailspin into another deep depression.

Concerned, Yates' husband called her doctor for a referral to a mental health hospital. Andrea Yates was referred to Dr. Mohammed Saeed, who requested a court ordered commitment to Austin State Hospital, for fear that Yates was a harm not only to herself, but to others as well.

Dr. Saeed continued Yates on the anti-depressants Wellbutrin XR and Effexor, and placed her on a new anti-psychotic medication called Risperdal. Andrea was released on April 13th 2001. It wasn't long before Yates was again admitted to Devereux Texas Treatment Network. On May 3rd, 2001 Andrea Yates filled her bathtub under the delusion that she couldn't pay her bills and needed to have extra water in case of emergency. It was then that Dr. Saeed agreed to prescribe the anti-psychotic Haldol (O'Malley, 2005).

Andrea Yates's condition began to stabilize, yet her behavior never changed drastically. Therefore, a month later, Dr. Saeed decided to discontinue Yates's Haldol injections, and he never prescribed another anti-psychotic medication in place of it. Andrea Yates had her last appointment with Dr. Saeed on June 18th, 2001. Two days later she drowned her five children (Spencer, 2005).

As discussed previously, several scholars believe that when women commit a crime that violates the female stereotype, that chivalry does not play a role, they receive a harsh punishment regardless. Clearly Yates' murders of her kids violate the stereotype of a loving, caring, protective mother. However, right from the beginning Andrea Yates's punishment never fit the crime. Even during the first trial when they found her sane they still did not sentence her to death. Instead, they opted for life in prison. Then, when the verdict was appealed due to false testimony, she received a more lenient sentence than she received at the first trial. The second verdict found her not guilty by reason of insanity. Why, because of false testimony about a television series? Surely that cannot be the sole reason for the change in outcome. After reading and analyzing several articles, I have found that Andrea's gender is not the reason why she escaped the death penalty. However, the reason her life was spared, was due to her history of mental illness.

Susan Smith:

On October 25th, 1994 Susan Smith drove to John D. Long Lake with her 3 year old son Michael and 14 month old Alex. Susan put the car in neutral and watched as the car rolled into the lake, drowning the 2 boys. Susan Smith later claimed that she had been carjacked by an African American man who drove off with her children still in the vehicle. On July 22nd, 1995, Susan Smith was found guilty of two counts of capital murder and was sentenced to life in prison. Smith will be eligible for parole in the year 2025, when she is fifty three years old (Rekers, 1996).

The jury determined that Susan Smith went through several traumatic experiences as a child and adolescent, therefore causing significant impairment in her judgment. These traumatic experiences include her fathers' suicide when she was just six years old, her brothers attempted suicide and the molestation by her stepfather when she was fourteen years old. The incest continued to occur up to three months before the murder of her children (Rekers, 1996).

Overnight Susan Smith's story broadcast internationally. Susan Smith was portrayed as a distraught mother whose children had been kidnapped by a black carjacker. The nation immediately empathized for Susan Smith. Everyone in her community wanted to help Susan and David get their two little boys back home (Taflinger, 1996). The day after the boys were announced "missing" reporter Gary Henderson Oct 26th of the *Spartanburg Herald-Journal* did an interview with Susan who pled for the release of her children. Susan was quoted saying "If they're lying somewhere dead, I want them home. Oh, God, I can't bear to think of that" (Rekers, 1996).

Regional newspaper and television coverage turned into national media coverage soon after Susan Smith's confession. Press coverage shifted from the initial standpoint of the distraught mother who had lost her children, to media accounts soon portraying Susan as a troubled adolescent who was a victim of sexual abuse. In addition they began to acknowledge Susan's previous suicide attempts and her "affairs" with married men (Hasian & Flores, 2000).

Due to the massive amount of media coverage defense attorney David Bruck, requested that the judge ban television cameras from the courtroom so that the prosecution and witnesses wouldn't be influenced (Taflinger, 1996). However Jay Bender, the attorney representing media organizations argued that Susan Smith generated national media coverage on her own, when she participated in local and national interviews that launched her story, therefore they should have access. Judge William Howard agreed with the defense and banned televised media from the court room proceedings (Taflinger, 1996).

Although defense attorney David Bruck got what he wished, it didn't erase the racial tension between the Caucasian and African American communities in South Carolina. Smith's accusation was painful to the black community because it displayed the "continued existence of racial images that resonated with many Americans" (Hasian & Flores, 2000). Susan Smith's brother Scott said that the Susan's faux accusation turned a "terrible misfortune into a racial issue" (Hasian & Flores, 2000). Another member of the African American community argued that Susan Smith's case was a classic example of the "stereotypical view of black men in America, that they are dangerous and that they should be imprisoned" (Hasian & Flores, 2000).

Although Smith hurt and insulted the African American community by accusing a black man of kidnapping her children, it did not seem to affect the jury's verdict. Of the twelve jurors on the Smith case, five of them were black. Of the five, four were males and one was female (McDonough, 1995; American Justice, 1997) Susan Smith could have received the death penalty, but she did not. Instead, the jury unanimously voted on life in prison. Therefore, I don't believe that any of the African American men, (who if anyone, would be most upset about Susan's accusation because it was directed toward them), or the African American women on the jury, took out their frustrations on Susan. They remained poised and professional and spared her life, regardless of how they felt about Susan's damaging and discriminative allegation.

In Smith's case, I believe that the chivalry hypothesis did play a role in Susan Smith's sentencing. If it hadn't, she would have been sentenced to the death penalty, which is the harshest punishment she could've received. However, the typicality thesis of chivalry suggests that chivalry and leniency is not applicable to women who commit the ultimate violent crimes, such as murdering their children, which Susan Smith did. Therefore, the typicality thesis rings untrue here.

Although Susan Smith was portrayed as an emotionally damaged adolescent whose depression and adjustment issues were caused by the sexual deviance of her stepfather, depression and suicidal ideation is simply not enough to cause a mother to murder her children. According to the National Institute of Mental Health, in the year 2006, depression had affected 14.8 million American adults (National Institute of Mental Health, 2006). The number of adults, who kill their children a year, is far less than those who suffer for depression. Therefore, I don't believe that depression and suicidal ideation justify the fact that Susan Smith murdered her sons.

Neurophysiologist George Rekers said although depression affects millions of people across the United States, it is extremely rare and unusual for someone diagnosed with depression to take their frustrations and anger out on other people by hurting them. In fact, depression is easily controllable with proper medication and almost all people who live with depression are able to live a normal and relatively healthy life as long as their depression is maintained (Schultz, 1995). Susan Smith's depression (which was caused by her fathers' suicide and molestation by her stepfather) should not have been the key reasons for why she was awarded a lesser sentence.

When comparing Susan Smith's case to the case study I conducted on Andrea Yates, I have found that the necessary punishment for Smith should have been the death penalty. Smith repeatedly

lied to police officers, family, friends, and the media about the whereabouts of her children, and although the sexual abuse from her stepfather began when she was thirteen, it lasted for ten years, until she was twenty three. As Smith grew older, she should have been able to make a conscious decision to stop the sexual abuse, particularly because she had moved out of her mother's home. Smith could have very well avoided Beverley Russell, yet according to psychiatrists, and Susan Smith herself, as she grew older, she claimed that the sexual interactions with her stepfather were consensual. Therefore, if Smith was depressed, then her sexual relationship with her step-father shouldn't have been the cause of her depression.

My research indicates that the reason Susan Smith did not receive the death penalty was due to the fact that the defense was successful in making Susan look like a grieving mother who was suffering from a warped childhood, filled with molestation, suicide, and depression. However, I have not found clear and convincing evidence that suggests Susan Smith was mentally ill at the time she killed her children.

Marcus Wesson:

On March 12, 2004, Marcus Wesson of Fresno, California, allegedly murdered his nine children. Among the nine children were Wesson's sons, daughters, and grandchildren; all of which he fathered. Marcus Wesson was also charged with 46 sex counts including rape and molestation of girls younger than fourteen.

Although Wesson displayed serious signs of mental illness, he refused to plead not guilty by reason of insanity and instead pled not guilty. On June 17th, 2005, a jury of five men and seven women found Wesson guilty of first degree murder. The jury found that he was a co-conspirator and the man responsible for the deaths of his nine children, although all DNA evidence pointed to his eldest daughter Sebhrenah as the one who actually pulled the trigger. Ten days later the same jury chose to sentence Marcus Wesson to death. On July 27th, 2005 Marcus Wesson was transported to Marin County where he entered death row at San Quentin State Prison (Francis, 2007).

What is unusual about Marcus Wesson's case is that unlike Andrea Yates and Susan Smith, Wesson never had any previous history of mental illness, at least none that is documented. The reason this is unusual is because Wesson's father was an alcoholic, who developed homosexual tendencies with his eighteen year old nephew, when Marcus was eighteen years old. According to sources, Marcus never showed any outward signs of anger towards his fathers' bisexuality (Francis, 2007). In addition, Marcus was a Vietnam War veteran. Many men who served in the Vietnam War suffered from post traumatic stress disorder, a life altering psychological disorder that causes hallucinations, flashbacks,

insomnia, and even violent behavior. In Marcus's case there were never any signs or clinical documentation of post traumatic stress disorder, or any other psychological illness that would result from the stresses of war (Francis, 2007; Najieb, 2005).

Another detail that is prevalent in Wesson's case but not in the others, is the incestuous relationships he had with his two of his daughters and three of his nieces. During the trial, it was also revealed that Marcus had sexual relations with two of his daughters and three of his nieces producing seven more children, who were also his grandchildren (Francis, 2007).

Marcus Wesson had strange beliefs in vampires, polygamy, and incest. Marcus justified incest to himself and the girls by telling them that having sex with a family member, who had similar genes, would produce a child that is a more perfected version of them. Marcus argued that the reason for polygamy was to create as many children "for the Lord" as quickly as possible. According to his niece Sofinas' testimony, the reason Marcus believed in vampires was because, like Christ, vampires also rise from the dead to live eternally (Ryan, 2005; Francis, 2007).

Marcus Wesson also had a previous minor criminal history, and was jailed for three months for welfare fraud and perjury; neither Andrea Yates nor Susan Smith had previous criminal histories (Francis, 2007). Another difference in Wesson's case was the modest media coverage it received. Although some media covered the funeral services and the trial, the Wesson case was of little interest nationally. Some have argued that this was due to the Michael Jackson child molestation trial that was taking place concurrently. However, the O.J. Simpson trial took place during the same time frame that Susan Smith murdered her two children and her case was broadcast across the world. Why? Why is it that the Smith case received such a large amount of attention and scrutiny? After all, the aggravating factors in the Wesson case far exceed those in the Smith and Yates cases.

What if it was Elizabeth who committed the murders? Would it have been a media obsession then? Moreover, would it have made a difference if it was a white male who committed the crimes that Wesson did?

The Wesson children were brutally murdered. Each child was shot in the right eye. Normally, the most horrific crimes sell the most newspaper. Yet the bloody deaths of the nine Wesson children captured little media attention both nationally and globally. In both the Yates and Smith case, the children died of asphyxiation, drowning. Some people may argue that their deaths were less violent; yet again they were made far more public than the Marcus Wesson case. To make matters more disturbing, Marcus Wesson had incestuous relationships with two of his daughters and three

of his nieces. The Wesson case has all factors that journalists and reporters can only wish for; violence, sexual abuse, and cult-like religious convictions. Why did the media fail, or refuse to explore such a horrific crime? Is it because it is easier to relate to the stresses of a woman?

There was little history of mental health problems in the Wesson family tree. Yet clearly Marcus Wesson had significant mental health issues since he was a man, who not only believed he was the Lord, but molested his children and nieces, and believed in vampirism. Marcus Wesson also served time in the Vietnam War as an ambulance driver. Could he have suffered from post traumatic stress disorder? According to the testimony of several of his daughters, his nieces, and neighbors, Wesson frequently spoke of the world “coming to an end” (Francis, 2007). Could he have felt this way due to his experiences in the Vietnam War? The main question here is why wasn’t their a significant focus on Wesson’s mental health? Andrea Yates mental health problems were a dominant factor in her trial. In addition, several of the books about Andrea contain interviews and discussions documents about her illnesses and hospitalizations from her physicians.

Another lingering question is why didn’t anyone contact the Department of Social Services? Were the women (particularly Sofina and Ruby) afraid for the lives of themselves, their children, or both? Did the women not want to separate their family for the sake of their children? There aren’t any concrete answers.

If Marcus’s wife Elizabeth knew about the long history of incest and sexual abuse, and didn’t say anything, should she too be held partially responsible for the molestation of her daughters and nieces? Moreover, should she be held somewhat responsible for the deaths of her children and grandchildren?

The chivalry hypothesis suggests that the criminal justice system sentences women more leniently than men. After analyzing the facts and the sentencing of the Andrea Yates case and the Susan Smith case, and comparing them with the Wesson case it appears that the chivalry hypothesis may hold true. Yates and Smith were both tried in death penalty states, yet neither received the death penalty.

In Wesson’s case, the only reason he was found guilty of murder was because the jury found him to be the “co-conspirator” in the deaths of at least two of the Wesson children. Wesson himself did not literally pull the trigger. Although Wesson coerced and forced his daughters and nieces to have sexual relations with him, evidence did not conclude that he physically murdered his children. In fact, all evidence pointed to his daughter Sebhrenah as the murderer. Therefore, why was Wesson sentenced to the

death penalty? Would he have been treated differently if he was a white man? Would it have been different if it was his wife who committed the crime?

Although it is my opinion that Marcus Wesson is a manipulative, deceiving, and disturbed man, who should be held accountable for his actions, pulling the trigger, was not his action, it was his daughters’. Therefore, I don’t believe it was fair for him to receive the death penalty. It is because he was sentenced to the death penalty that I believe the chivalry hypothesis rings true. Yates and Smith, both admit to having killed their children and are spared the death penalty, and are awarded more lenient sentences. Yet, Wesson, who was simply a co-conspirator to the murders, is given the most harsh sentence of all, death.

Michael and Carolyn Riley/ Helen Kirk:

The last two case studies cases are out of Massachusetts, which unlike the states in the other cases is not a death penalty state. Carolyn and Michael Riley from Hingham, Ma were arrested for allegedly overdosing their four year old daughter Rebecca on three powerful prescription drugs: Clonidine, Seroquel, and Depakote (Brookes, 2007; Tatz & Reinert, 2007). This case is extremely controversial based on a previous history of domestic violence and heated topic of medicating toddlers and young children.

In July, 2007, the two filed a motion for the judge to dismiss the indictment, on the grounds that the prosecution swayed the grand jury by omitting information relevant to the case, a hearing date has yet to be scheduled (Ellement, 2007).

On March 8th, 2005, Helen Kirk of Carver Massachusetts allegedly strangled her three year old son Justin to death. Kirk was arrested and charged with first degree murder. Kirk’s attorney Jack Atwood filed a petition for commitment in hopes that after a mental health evaluation, Helen would be found incompetent to stand trial, and able to plead not guilty by reason of insanity. However after four extensive mental health evaluations, Helen Kirk waived her right to a jury trial and on September 18th, 2007, a judge sentenced Helen to Taunton State Hospital. Kirk will be annually re-evaluated to determine whether or not she will be committed.

Conclusion:

After an intensive analysis the literature I argue that in Andrea Yates’s case the chivalry hypothesis did not apply, it did apply in Susan Smith’s case, and applied a second time in the case of Marcus Wesson. However, there were a variety of limitations to the study that could have affected the outcome of the research. First, there was a lot of subjectivity to how the study was

conducted. The study lacked face to face interviews confirming any of the information found in the literature. There was also very little, if any, literature on the relationship between the chivalry hypothesis and filicide. Secondly, two of the cases that were scheduled to go to trial during the time frame of the research, did not. Thirdly, this research study was predominantly qualitative and therefore the research design contained minimal amount of statistics. Given the ten week time period to complete the research, this study was strictly exploratory and numerous questions are left to be answered.

For future research I suggest examining how race and social class can contribute to how the criminal justice system sentences individuals, both male and female. Another remaining question is: does the salaciousness of the crime affect the amount of media attention a case receives? Lastly, how does gender intersect with race, social class, and the salaciousness of the crime and how do all of these aspects affect not only sentencing, but how and when the chivalry hypothesis if at all is applied?

Works Consulted

Administration for Children & Families, (2005). "Child Abuse & Neglect Statistics". Retrieved on June, 7, 2007. <http://www.childwelfare.gov/systemwide/statistics/can.cfm>. American Justice, The Susan Smith Story: A Mother's Confession. (1997). DVD Documentary: A&E, Cat No. AAE-73554.

Author Unknown. (2003). "Who is Andrea Yates? A Short Story About Insanity." *Duke Journal of Gender Law & Policy*. 10 (1). 61-75.

Barnett, B. (2005). "Perfect Mother or Artist of Obscenity? Narrative and Myth in a Qualitative Analysis of Press Coverage of the Yates Murders." *Journal of Communication Inquiry*. 29 (9), 9-29.

Brookes, A.C. (2007). "Affidavit in Support of Application for Arrest Warrant: Riley Homicide Arrest Warrant." Trial Court of Massachusetts. District Court Department: Hingham, Ma 02043.

Coontz, P. (2000). "Gender and Judicial Decisions: Do Female Judges Decide Cases Differently than Male Judges?" *Gender Issues*. 60-73.

Curran, D.A. (1983). "Judicial Discretion and Defendant's Sex." *American Society of Criminology*. 21 (1), 41-58.

Ellement, J.R. (2007, July 10). "Woman files motion to dismiss indictment." *Boston Globe*.

Farnworth, M. & Teske, R.H.C. (1995) "Gender Differences in Felony Court Processing: Three Hypotheses of Disparity." *Women & Criminal Justice*. 6 (2), 22-44.

Francis, M. (2007). *By Their Father's Hand: The True Story of the Wesson Family Massacre*. New York, NY: HarperCollins Publishers.

Freidman, S.H., Horwitz, S.M., Resnick, P.J. (2005). "Child Murder by Mothers: A Critical Analysis of the Current State of Knowledge and Research Agenda." *American Journal of Psychiatry*. 162, 1578-1587.

Grabe, M.E., Trager, K.D., Lear, M., & Rauch, J. (2006). "Gender in Crime News: A Case Study Test of the Chivalry Hypothesis." *Mass Communication & Society*. 9 (2), 137-163.

Hasian, M., & Flores, L.A. (2000). "Mass Mediated Representations of the Susan Smith Trial." *The Howard Journal of Communications*. 11, 163-178.

Laporte, L., Poulin, B., Marleau, J., Roy, R., & Webanck, T. (2003). "Filicidal Women: Jail or Psychiatry Ward?" *Canadian Journal of Psychiatry*, 48 (2), p. 94 Retrieved November 1, 2006, from EBSCO Host: Research Databases.

- Mann, C.R. (1984). "Race and Sentencing of Female Felons: A Field Study." *International Journal of Women's Studies*, 7 (2), 160-170.
- McDonough, M. (1995, July 16). "Buck Argues too Few Women are on Panel". *Herald-Journal*. <http://www.teleplex.net/shj/smith/trial/susanjur.html>.
- Meyer, C.L., & Oberman, M. (2001). *Mothers Who Kill Their Children: Understanding the Acts of Moms from Susan Smith to the "Prom Mom"*. New York, NY: New York University Press.
- Najieb, J.D.(2005). *Mysterious Web of Deception*. Fresno, CA: Ann Marie Production.
- National Institute of Mental Health (n.d.) "Depression." Retrieved July 16, 2007, from <http://www.nimh.nih.gov/healthinformation/depressionmenu.cfm>.
- O'Hare, P. (2006, July 28). Yates' jail time not quite done. *Houston Chronicle*.
- O'Malley, S.(2005). *The Unspeakable Crimes of Andrea Yates*. New York, NY: Pocket Star Books.
- Pearson, P. (1997). *When She Was Bad: Violent Women and the Myth of Innocence*. New York, NY: Penguin Putnam.
- Rekers, G. (1996). *Susan Smith: Victim or Murder?* Lakewood, CO: Glenbridge Publishing Ltd.
- Reza, E.M. (2005). *Duke Journal of Gender Law & Policy*, 12 (179), 180-213.
- Spencer, S. (2005). *Breaking Point*. New York, NY: St. Martins Press.
- Taflinger, R.F. (1996, May 29). "The Susan Smith Trial and Televeision: A Commentary." Retrieved July, 6, 2007, from <http://www.wsu.edu:8080/~taflinge/smith.html>
- Williams, M.R. (1999). "Gender and Sentencing: An Analysis of Indicators." *Criminal Justice Policy Review*, 10 (4), 471-490. Retrieved November 1, 2006, from Criminology: A SAGE Full-Text Collection.

Interactions of cis-bis Ruthenium Complexes with Monosaccharides

LINDSAY McDONALD

Lindsay is a senior Biology and Chemistry double major. This project began as volunteer work in Lindsay's sophomore year and has continued with the aid of several ATP grants throughout her undergraduate career. Lindsay and her mentor, Dr. Steven Haefner, have presented this work at the American Chemical Society conferences in San Diego and Atlanta, and will also present at the 2008 meeting in New Orleans. Lindsay has also presented this work at an international conference in Konstanz, Germany. This work is part of an honors thesis which will be defended in April of 2008. Lindsay plans to go on to medical school to pursue a joint MD/PhD degree.

Abstract

Molecular recognition and binding of oligosaccharides play an essential role in many biological processes including cell-cell recognition, signaling and adhesion. Our group is currently involved in the development of metal based receptors that can effectively bind specific glycoconjugates. Species that can selectively bind and chemically alter membrane glycoconjugates have the potential to inhibit tumor cell metastasis, inflammation and fibrosis. As an initial step towards our goal the interactions of cis-Ru(bpy)₂(DMF)₂²⁺ (bpy = bipyridine, DMF = dimethylformamide) and cis-Ru(acac)₂(CH₃CN)₂⁺ (acac = acetylacetonate) with the monosaccharides glucose and mannose have been examined to identify and understand the conditions necessary for complexation of sugars to ruthenium. Cis-Ru(bpy)₂(DMF)₂²⁺ has been synthesized from cis-Ru(bpy)₂Cl₂ by addition of Ag⁺ which removes the chloride ions as silver chloride. This newly isolated compound represents a valuable precursor for binding studies with monosaccharides because we expect that the DMF ligands will be readily displaced. Binding studies with cis-Ru(bpy)₂(DMF)₂²⁺ and simple monosaccharides indicate, however, that metal-sugar interactions are extremely weak. In order to strengthen these interactions, a second compound, cis-Ru(bpy)₂(MeOH)₂²⁺ was isolated with the idea that the methanol group will be even more easily displaced than the DMF. Complexation studies suggest that addition of sugar to cis-Ru(bpy)₂(MeOH)₂²⁺ resulted in modest changes in the electronic absorptions of cis-Ru(bpy)₂(MeOH)₂²⁺. Such changes suggest that when weakly coordinating solvents such as methanol are present weak metal-saccharide complexation occurs in solution.

Introduction

Oligosaccharides in the form of glycolipids and glycoproteins line the surface of the cellular membrane and are vital for the molecular recognition and binding of proteins called lectins.¹ These oligosaccharide-lectin interactions are responsible for a variety of biological processes including cell-cell recognition, communication, regulation, and immune defense.^{2,3,4} Expressed at the terminus of each membrane oligosaccharide are tetrasaccharide moieties called sialyl

1. St. Hilaire P.M.; Halkes K.M.; Crocker P.R.; Meldal M. *J. Comb. Chem.* **2003**, 5, 18-27.

2. Sharon N.; Lis H. *Chem.Rev.*, **1998**, 98, 637-674.

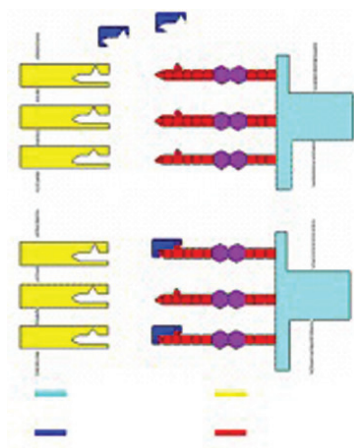
3. Dwek R.A. *Chem. Rev.* **1996**, 96, 683-720.

4. Dwek R.A. *Chem. Rev.* **2002**, 102, 283-284.

lewis^x and sialyl lewis^a.^{5, 6} Sialyl groups are known to be over-expressed on many highly metastatic cancer cells including liver, pancreatic, breast, and lung carcinomas.⁷ Accordingly, it is believed that the interactions of lectins with sialyl lewis^x and sialyl lewis^a play a considerable role in cancer cell metastasis. This evidence suggests that a small molecule capable of inhibiting the binding of lectins to the sialyl groups may slow metastasis by inhibiting adhesion of cancerous cells to local endothelium; ultimately preventing the initial step in the spreading of malignant tumor cells. Currently there are two strategies for the inhibition of carbohydrate lectin interactions. The most common approach has been to develop compounds that mimic the sialyl groups that are naturally expressed, causing the lectins to target the mimetics rather than the endothelial cells.^{8, 9}

A second approach, the long-term goal of this project, is to develop metal based artificial receptors that selectively bind and essentially cap the sialyl groups of membrane glycoconjugates (Figure 1). This “capping” action will thereby prevent the recognition of the saccharides by the lectins, and potentially inhibit adhesion. To

Figure 1.



be far more competitive. The long-term goal of developing such receptors is predicated on the hypothesis that the metal-oxygen covalent bond will be inherently stronger than the hydrogen bonds of the lectin.

Metal ions, including magnesium and calcium, have been found to participate in the mediation of carbohydrate recognition in several metal based lectins including concanavalin and

isolectin.¹⁰ The presence of metals in carbohydrate based receptors is not surprising in that each of the hydroxyl groups found on carbohydrates represent binding sites in the ideal configuration for forming metal chelates. Despite the capacity for metal binding, this area of carbohydrate chemistry remains relatively unexplored.^{11, 12} To date, only a limited number of well-characterized metal-carbohydrate complexes have been reported, particularly amongst the second and third row transition metals.^{13, 14, 15, 16} In an attempt to expand this field we are examining the reactivity of cis-bis chelate complexes of the general type $\text{Ru}(\text{L-L})_2(\text{solvent})_2$ with simple monosaccharides. The use of cis-bis metal complexes for carbohydrate coordination is predicated on the idea that chelating ligands such as bipyridine and acetylacetonate will readily retain their cis geometry around the metal center leaving two available sites for saccharide complexation. Furthermore, chelating ligands will prevent the formation of coordination polymers between the metal ion and the sugars. The remaining coordination sites of the metal center are occupied by labile solvent molecules such as dimethylformamide or acetonitrile which may be readily displaced by the hydroxyl groups of the sugar. With this in mind, we have synthesized the partially solvated Ru(II) complex cis-[Ru(bpy)₂(DMF)₂][BF₄]₂ (**1**) and cis-[Ru(bpy)₂(CH₃OH)₂][BF₄]₂ (**2**), as well as the tetrafluoroborate salt of cis-[Ru(acac)₂(CH₃CN)₂]⁺ (**3**). Herein we report the reactivity of compounds **1-3** with glucose and mannose.

Results and Discussion

Synthesis and Characterization of solvated cis-bis-Ruthenium Complexes.

Cis-[Ru(bpy)₂(DMF)₂][BF₄]₂ (**1**) was chosen as an initial molecule of interest because the cis geometry and chelating nature of the bipyridine ligands retains available cis-coordination sites in the appropriate configuration for metal-saccharide complexation. These sites are temporarily maintained by the fairly labile DMF ligand that can be readily displaced by a more favorable, or more strongly complexing molecule. Cis-[Ru(bpy)₂(DMF)₂][BF₄]₂ (**1**) has been synthesized from ruthenium dichloride in DMF by addition of silver tetrafluoroborate. The addition of Ag⁺ ion causes the coordinated chloride ions to precipitate as silver chloride. Because of the non-coordinating nature of the BF₄⁻ counterion, the chloride ions are replaced by the DMF solvent. The red-violet

5. Pratt M.R.; Bertozzi C.R. *Organic Letters* **2004**, 6, 2345-2348.

6. Peters T.; Haselhorst T.; Weimer T. *J. Am. Chem. Soc.* **2001**, 123, 10705-10714.

7. Matta K.L.; Xia J.; Alderfer J.L.; Locke R.D.; Piskorz C.F. *J. Org. Chem.* **2003**, 68, 2752-2759.

8. Koreeda M.; Lowe J.B.; Chervin S.M. *J. Org. Chem.* **2002**, 67, 5654-5662.

9. Itzstein M.V.; Kiefel M.J. *Chem. Rev.* **2002**, 102, 471-490.

10. Loris R.; Jaeger K.; Tielker D.; Wyns L. *J. Mol. Bio.* **2003**, 331, 861-870.

11. Yano S.; Miketa Y. *Bull. Chem. Soc. Jpn.* **2002**, 75, 2097-2113.

12. Klufers P.; Kunte T. *Chem. Eur. J.* **2003**, 9, 2013-2018.

13. Klufers P.; Ahlrichs R.; Ballauff M.; Eichkorn K.; Ahnemann O.; Kettenbach G. *Chem. Eur. J.* **1998**, 4, No. 5.

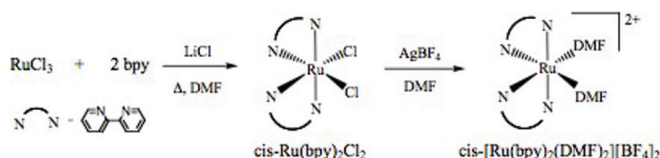
14. Klufers P.; Kunte T. *Eur. J. Inorg. Chem.* **2002**, 1285-1289.

15. Steinborn D.; Bruhn C.; Junicke H.; Kluge R.; Serianni A.S. *J. Am. Chem. Soc.* **1999**, 121, 6232-6241.

16. Steinborn D.; Junicke H. *Chem. Rev.* **2000**, 100, 4283-4317.

solution thus produced is filtered to remove the precipitated solid. Despite the expected inertness of a low spin d^6 metal ion, the loss of chloride ion occurs rather quickly, only requiring several hours of stirring at room temperature (Equation 1). The compound can be isolated cleanly in 61% yield by stripping away the solvent under vacuum and washing the resulting residue with hexanes and tetrahydrofuran. Alternatively, single crystals suitable for x-ray diffraction studies may be obtained by slow diffusion of tetrahydrofuran through a layer of hexanes into a DMF solution of the compound. The compound in situ is air stable, however the isolated compound tends to be hygroscopic and is best stored in a dry environment.

Equation 1.

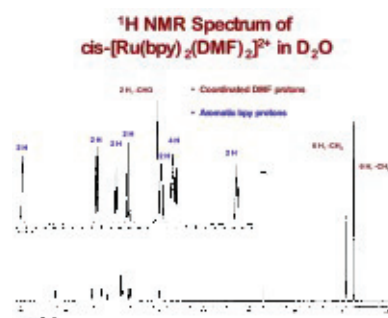


While generally unremarkable the IR spectrum of **1** reveals the presence of BF_4^- counterion ($\nu(\text{B-F}) = 1064 \text{ cm}^{-1}$) corresponding to the removal of chloride ions. Additionally, the IR shows stretching vibrations for coordinated DMF ligands ($\nu(\text{C=O}) = 1645 \text{ cm}^{-1}$). The shift of the carbonyl band to lower energy compared to free DMF is consistent with an oxygen bound DMF ligand. The ^1H NMR spectrum in D_2O shows eight resonances in the aromatic region ranging from 7.13 to 9.29 ppm (Figure 2). These resonances correspond to the two magnetically inequivalent rings of the bipyridine ligand; where one ring is trans to the DMF ligand and the second ring is adjacent to the DMF. This inequivalency is characteristic of bipyridines in a cis disposition. Resonances for the two coordinated DMF ligands appear at 2.73, 2.89 and 7.80 ppm. The electronic spectrum in DMF exhibits broad absorptions at 357 nm and 507 nm. Both of these absorbances are extremely intense giving dark, red-violet colored solutions. Consequently, samples must be made extremely dilute in order to obtain accurate and on-scale spectra.

In an attempt to increase the affinity for saccharide coordination we have also prepared and attempted to isolate the analogous methanol complex, $\text{cis-}[\text{Ru}(\text{bpy})_2(\text{CH}_3\text{OH})_2][\text{BF}_4]_2$. The coordinated methanol ligands should be even more weakly held than the DMF ligands, thus increasing the favorability for complexation to monosaccharides. The preparation for this compound has been reported previously by Rillema,¹⁷ but the

compound was not isolated from the reaction mixture. Addition of methanol to a mixture of $\text{cis-Ru}(\text{bpy})_2\text{Cl}_2 \cdot 2\text{H}_2\text{O}$ and two molar equivalents of AgBF_4 produces a red-orange solution after stirring for 12 hours. After filtration to remove the AgCl byproduct, a red solid was obtained by subsequent evaporation of the solvent. A ^1H NMR spectrum of the isolated solid in D_2O revealed the presence of a second ruthenium bipyridine complex as a minor impurity.

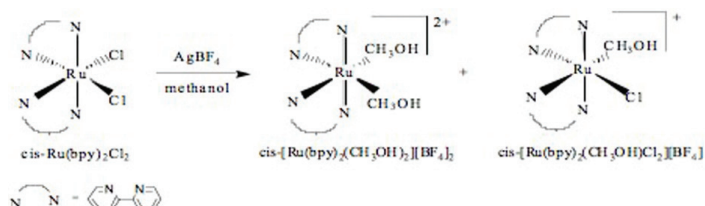
Figure 2



The spectrum of the major product exhibits a total of eight resonances in the aromatic region typical of a cis, disubstituted bipyridine complex. The minor product, estimated by integration to comprise 20% of the mixture, shows

sixteen resonances. This large number of aromatic signals indicates a highly asymmetric structure and strongly suggests the presence of a monosubstituted species (Equation 2). Nevertheless, this sample was used in-situ to perform a qualitative titration with glucose (*vide infra*).

Equation 2.



A third compound, $\text{cis-}[\text{Ru}(\text{acac})_2(\text{CH}_3\text{CN})_2][\text{BF}_4]$ (**3**), was also prepared. This compound was selected because of the cis orientation of labile ligands which is similar in characteristic to the bipyridine compound. $\text{Cis-Ru}(\text{acac})_2(\text{CH}_3\text{CN})_2^+$, however, should have a higher affinity for saccharide coordination due to the replacement of the nitrogen donating atoms of the bipyridine for the oxygen donating acetylacetonate ligands. The harder oxygen donors should electronically tune the metal center for coordination to a second oxygen donating molecule, in this instance the hydroxyl groups of the monosaccharide. Furthermore, the higher oxidation state, Ru(III) in **3** vs. Ru(II) in **1**, should enhance sugar coordination.

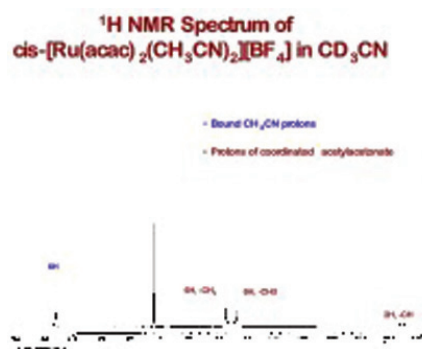
$\text{Cis-}[\text{Ru}(\text{acac})_2(\text{CH}_3\text{CN})_2][\text{BF}_4]$ was prepared based on a modification of the procedure first reported by Shimizu.¹⁸

17. Rillema, D.P; Macatangay, A; Zheng, G.Y; Jackman, D.C; Merkert, J.W. *Inorg. Chem.* **1996**, 35, 6823- 6831.

18. Kasahara, Y; Hoshino, Y; Shimizu K; Sato G.P. *Chem. Lett.* **1990**, 381-384.

Ruthenium(III) trisacetylacetonate ($\text{Ru}(\text{acac})_3$) was stirred in acetonitrile with HBF_4 resulting in a color change from magenta to purple. This is indicative of the removal of one acetylacetonate ligand and exchange for two acetonitrile ligands. Removal of the solvent, followed by dissolution in water and subsequent extraction with an acetonitrile-methylene chloride mixture, results in a purple-blue solution from which **3** is obtained in 90% yield. The complex is soluble in polar solvents such as water, dimethylformamide, and dimethylacetamide. It also undergoes slow solvent ligand exchange as monitored by UV-vis spectroscopy. The solvent exchange process is kinetically slow, but full exchange does occur in 72+ hours with most solvents.

Figure 3



The IR spectrum of $\text{cis-Ru}(\text{acac})_2(\text{CH}_3\text{CN})_2[\text{BF}_4]$ shows the presence of the BF_4^- anion, as well as the presence of acetonitrile indicated by the CN stretch at 2296 cm^{-1} . The ^1H NMR spectrum in D_2O reveals four major resonances which is consistent with the reported spectral data by Shimizu¹⁸ (Figure 3). Two major signals are seen for the coordinated acetylacetonate protons at -23 and -27 ppm, as well as a resonance for the methine protons at -85 ppm. The additional signal is for the coordinated acetonitrile protons and appears at 36 ppm. Each resonance is broadened and shifted, consistent with the paramagnetic nature of the Ru(III) complex.

Reactivity with monosaccharides. Simple addition of excess glucose or mannose to $\text{Ru}(\text{bpy})_2(\text{DMF})_2^{2+}$ (**1**) in either DMF or H_2O at room temperature produced no dramatic changes in the UV-vis spectrum. Monitoring the reaction by ^1H NMR also shows no significant changes. Likewise, $\text{Ru}(\text{acac})_2(\text{CH}_3\text{CN})_2^+$ showed no obvious spectral evidence of complexation in H_2O . Taken together, these results suggest that sugar coordination is extremely weak, if at all existent. In both instances the hydroxyl groups are unable to compete with the coordinating solvent which is present in a substantial excess in solution.

Klufers⁷ and Striegler¹⁹ have shown that saccharide complexation may be enhanced by the addition of a base to deprotonate the hydroxyl groups of the sugars thereby creating a better ligand. This information led us to examine the effects that the addition of various bases would have on the cis-bis chelates of ruthenium. Addition of sodium hydroxide to aqueous solutions of **1** and **3** caused an immediate color change resulting from the coordination of hydroxide ion to the metal center. Addition of increasing amounts of glucose to **1** and **3** in strongly basic aqueous solution resulted in no discernable change in their electronic spectra (Figure 4-6). The non-shifting ruthenium absorptions indicate that the hydroxyl groups of the saccharide are unable to adequately compete with the hydroxide ion for metal complexation even in the presence of excess sugar. A similar study was also performed with **1** and **3** using sodium bicarbonate as a base. Reaction of the bicarbonate ion HCO_3^- with acidic protons would produce CO_2 which would then be released as a gas. Addition of NaHCO_3 immediately produced a color change in both **1** and **3**. However, addition of excess glucose failed to produce any further changes in the subsequent UV-vis spectra.

Together, these studies lead to the conclusion that hydroxide is too strongly coordinating and therefore must be avoided. Fully eliminating hydroxide ion requires discontinuing the use of aqueous solutions and replacing them with a weakly coordinating solvent. The solvent must be less coordinating than DMF, yet still dissolve the sugar. To this end, we have synthesized the methanol species $\text{cis-Ru}(\text{bpy})_2(\text{CH}_3\text{OH})_2[\text{BF}_4]_2$ (*vide supra*) and investigated its reactivity with glucose. The methanol solvated species in solution exhibits increasing absorption maxima upon addition of glucose in a qualitative titration. The band at 500 nm shows a slight red shift and the band at 350 nm blue shifts with increasing monosaccharide concentration (Figure 7). Changes of this nature, coupled with the increasing absorption maxima suggest that binding is occurring in solution. Not surprisingly, these binding associations are weak. ^1H NMR suggests that the sugar is dynamically exchanging with the free sugar present in solution. In order to further strengthen complexation, it may be necessary to remove the hydroxyl protons of the sugar by the addition of a non-coordinating base, such as 1,8-bis-(dimethylamino)-naphthalene.

Conclusion. We have been able to prepare solvated cis-bis-chelate complexes of ruthenium by halide abstraction from $\text{Ru}(\text{bpy})_2\text{Cl}_2$. Based upon their ^1H NMR spectra, both species maintain their cis coordinating geometries. Complexation studies by UV-vis and ^1H NMR with monosaccharides suggest that the use of a weakly coordinating solvent in non aqueous solutions greatly enhances metal-sugar binding. We anticipate that the addition of a non-coordinating base will improve coordination. Future studies

19. Striegler, S.; Dittel, M. *Inorg. Chem.*, **2005**, 44, 2728-2733.

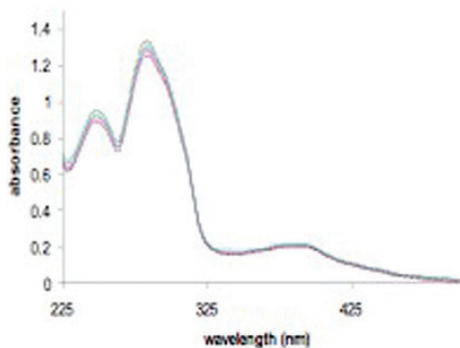


Figure 4. Titration of 1 with glucose from (0-15) equivalents.

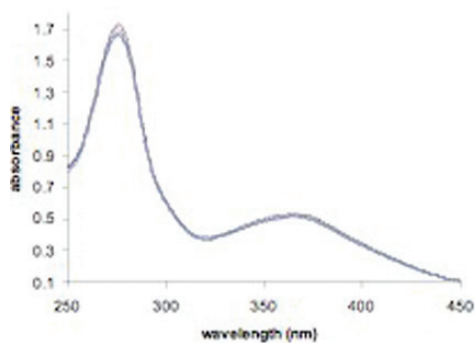


Figure 5. Titration of 3 with glucose from (0-15) equivalents.

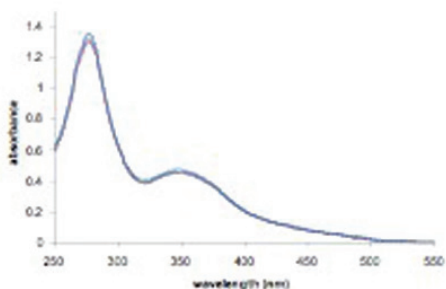


Figure 6. Titration of 3 with mannose from (0-15) equivalents.

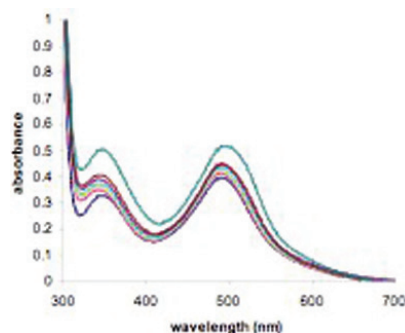


Figure 7. Qualitative titration of 2 with glucose in methanol.

will focus on identification of the exact conditions necessary to strengthen metal-saccharide complexation. This information, in turn, will lead to the isolation of strongly complexed species, as well as development of more sophisticated bi- and poly-metallic species for the selective binding of oligosaccharides.

Experimental

General Considerations. All manipulations were performed in air except where noted. Air and moisture sensitive compounds were manipulated using standard Schlenk techniques or in a dry box. All solvents and reagents were purchased from commercial sources and used as received. Silver tetrafluoroborate was purchased from Aldrich and ruthenium(III) trisacetylacetonate was purchased from STREM. Uv-vis spectra were collected on a Hewlett-Packard 8543 diode-array spectrophotometer. Infrared spectroscopies were performed as a Nujol mull between sodium chloride plates. ^1H NMR spectroscopies were performed on either a 400 or 600 MHz JEOL-ECX spectrometer.

Preparations.

cis-Ru(bpy) $_2$ Cl $_2$ ·2H $_2$ O. The compound was prepared according to a modification of techniques previously published.²⁰ A mixture of 3.9 g RuCl $_3$ ·xH $_2$ O (0.0149 moles), 4.68 g bipyridine (0.03

moles) and 2.9 g LiCl (0.0684 mol) were refluxed under argon in dimethylformamide (25 mL) for 8 hours. During this time a series of color changes were observed that ultimately gave a dark plum colored solution. After cooling to room temperature, 125 mL of acetone was added and the resulting suspension was filtered through a medium porosity frit in open air. The dark green-black microcrystalline product was washed with 3 x 25 mL portions of distilled water, followed by 3 x 25 mL diethyl ether. An additional 5 mL of distilled water was used to remove residual product from flask along with 10 mL additional diethyl ether. The product was then dried by vacuum, 5.55 g. (71% yield based on ruthenium).

cis-[Ru(bpy) $_2$ (DMF) $_2$][BF $_4$] $_2$ (1). To a 20 mL vial, 0.100 g (0.192 mmoles) Ru(bpy) $_2$ Cl $_2$ ·2H $_2$ O, and 0.075 g (0.385 mmoles) AgBF $_4$ was added, and the mixture was stirred in 3 mL dimethylformamide overnight. A small amount of celite was used in a medium porosity frit to aid filtration of the AgCl precipitate from the red-violet solution. The celite plug was washed with an additional 2 mL dimethylformamide. The solvent was then removed by rotary evaporation. The resulting garnet colored residue was washed with hexanes and tetrahydrofuran and dried under vacuum. 0.086 g (61% yield based on ruthenium). UV(dmf) λ_{max} nm 357, 503. IR (Nujol, NaCl) C=O 1645 cm $^{-1}$, B-F 1063 cm $^{-1}$. ^1H NMR (D $_2$ O, δ): 9.29 (d, 2H), 8.65 (d, 2H), 8.43 (d, 2H), 8.23 (t, 2H), 7.89 (s, 2H), 7.75 (t, 2H), 7.57 (m, 4H), 7.13 (t, 2H), 2.89 (s, 6H), 2.73 (s, 6H).

cis-[Ru(bpy)₂(CH₃OH)₂][BF₄]₂ (2). In a 20 mL vial, 0.100 g (0.192 mmoles) Ru(bpy)₂Cl₂·2H₂O, and 0.075 g (0.385 mmoles) AgBF₄ were added to 3 mL methanol. After stirring overnight, the solution was filtered to remove AgCl(s) and washed with an additional 2 mL of methanol. Rotary evaporation was used to dry the red-orange solution. The residue was washed with hexanes and tetrahydrofuran yielding a red microcrystalline solid. 0.083 g (68% yield based on ruthenium). UV (methanol) λ_{max}, nm 348, 492. ¹H NMR (D₂O, δ): 9.24 (d, 1H), 8.45 (d, 1H), 8.24 (d, 1H), 8.12 (t, 1H), 7.78 (m, 2H), 7.62 (m, 2H), 6.97 (t, 1H).

cis-[Ru(acac)₂(CH₃CN)₂][BF₄] (3). In a 200 mL round bottom flask, 0.500 g (1.36 mmoles) Ru(acac)₃ was added to 100 mL acetonitrile. 0.2 mL HBF₄ was added resulting in an immediate, gradually intensifying color change from magenta to purple. The solution was stirred for one hour after which the solvent was removed by rotary evaporation. The purple-blue residue was washed three times with hexanes. The residue was then redissolved in 40 mL of water and the compound was extracted with a 7:3 mixture of methylene chloride and acetonitrile solution which was added in 100 mL portions. The solution was then stirred over magnesium sulfate for 30 minutes, filtered, and washed with additional methylene chloride. The solvent was then removed by rotary evaporation and the solid dried under vacuum. (90% yield based on ruthenium). UV λ_{max}, nm 283, 580. IR (Nujol, NaCl) CN 2296 cm⁻¹, B-F 1058 cm⁻¹. ¹H NMR (D₂O, δ): -85 (s 2H), -27 (s, 6H), -23 (s, 6H), 36 (s, 6H).

Titration with monosaccharides. All titrations were monitored by Uv-vis spectroscopy and were performed using quartz cuvettes with a 1 cm pathlength over a range of 200-900 nm. Titrations were performed at room temperature in 0.01 M NaOH(aq) solution. 0.01 M saccharide solution was added in increasing amounts to 0.085 mM Ru(acac)₂(CH₃CN)₂⁺ or 0.055 mM Ru(bpy)₂(DMF)₂²⁺ solutions. The total volume and total concentration of metal complex were kept constant at 2 ml throughout the duration of the experiment by adding the appropriate amount of 0.01M sodium hydroxide solution. In each instance dissolution of the metal complexes produces an immediate color change, presumably due to the displacement of the weakly held solvent by hydroxide ions. With the exception of the stock solutions the Uv-vis absorbances of the resulting mixtures were measured immediately upon preparation.

Acknowledgement

The author thanks the Adrian Tinsley Program for the generous funding of this research.

Kinematic Analysis of Mylonitic Rocks, Southern Ruby Mountains, SW Montana: Evidence for Proterozoic Orogenic Crustal Thickening and Topographic Collapse

JESSICA SOUSA

Jessica is a senior Earth Science major who conducted her research under the mentorship of Dr. Michael Krol with funding from an Adrian Tinsley program summer grant.

Abstract

Mylonitic granitic rocks from a large shear zone within the southern Ruby Mountains in southwest Montana record evidence for a multiple tectonic movement history. The shear zone is 500 meters thick with ductile shear fabrics generally striking northeast and dipping to the northwest. Foliations in the adjacent country rocks are sub-parallel to the foliations within the mylonites suggesting shear zone development was contemporaneous with the regional deformation and metamorphism of the country rock. A well-developed mineral stretching lineation, defined by aligned sillimanite crystals, records predominantly dip-slip movement, but locally, oblique-slip is also preserved. Sheath-type folds developed in thin calc-silicate layers in calcitic marble have axial orientations similar to the down-dip mineral stretching lineations of the shear zones.

Mesoscopic and microscopic analysis of the mylonites reveals the presence of asymmetric kinematic indicators that record a strong top-to-the-south sense of shear associated with regional compression, thrusting, and crustal thickening. However, in places an opposite shear sense can be identified indicating a period of top-to-the-north sense of shear corresponding with extension, normal faulting, and crustal thinning. The thrust episode is consistent with tectonic shortening and associated high-grade metamorphism reaching 750-800°C and 7-11 kb. Normal movement appears to postdate thrusting, suggesting either a period of post-orogenic collapse due to topographic collapse resulting from an overthickened metamorphic pile (which can be seen today in the Himalayas) or a discretely younger tectonic event. However, the high temperature minerals that define the mineral lineation suggest they were closely related temporally. The timing of deformation, metamorphism, and mylonite formation in this area is unknown, although regional tectonic arguments suggest that high-grade metamorphism is associated with the Proterozoic, 1.78-1.71 Ga Big Sky Orogeny.

Introduction

Recent studies, north of the Ruby range, in the Tobacco Root Mountains (e.g. Burger et al., 2004; Harms et al., 2004) has revealed geologic evidence for a Proterozoic tectonic event termed the Big Sky Orogeny that occurred 1.78 to 1.71 Ga. The Big Sky Orogeny was associated with collisional tectonics and high-grade metamorphism. The goal of this project is to study the kinematic

history of mylonitic rocks in an effort to unravel a portion of the tectonic history affecting the southern portion of the Ruby Mountains in southwestern Montana. Asymmetric kinematic indicators allow for the determination of the sense of movement in ductile shear zones and provide information on the nature of tectonism that affected this region. In addition, metamorphic mineral assemblages in the ductile shear zones and adjacent country rocks yield information on the P-T conditions during the development of the ductile shear zone. Our work will provide a better understanding of the nature of tectonic activity in this part of southwest Montana in Proterozoic time. A modern analog similar to the results obtained in this study is found in the Himalayas of Pakistan and Nepal. Continued continental collision between the Indian and Eurasian plates resulted in the formation of numerous thrust faults and subsequent high-standing topography. The South Tibetan detachment, which is a large-scale normal fault, developed in response to the gravitational instability due to the overthickened crust (Burchfiel et al., 1992). Normal motion within the Himalayan orogen continues today even though it is within an overall compressional tectonic environment.

Background

The Ruby Mountains are one of several Archean-aged (2.7 Ga) metamorphic and igneous basement-cored uplifts exposed during Late Cretaceous-Tertiary time (Tysdal, 1981). The range extends approximately 60 km along its northeast trend and 20 km across in an east-west direction. The Ruby Mountains occur along the northwestern margin of the Wyoming province. Rocks in the Ruby and Tobacco mountains are believed to have been subsequently metamorphosed about 1.78-1.71 billion years ago during an event known as the Big Sky Orogeny (Harms et al., 2004a; 2004b). This event was first described as affecting rocks in the Tobacco Root Mountains to the north but most likely extends into the Ruby Mountains to the south (Burger et al., 2004; Harms et al., 2004a).

Several different lithologic units are present throughout the study area. These include; 1) biotite and hornblende gneisses, 2) calcitic-dolomitic marble, 3) amphibolite, 4) sillimanite-pelitic schists and gneisses, 5) quartzites, 6) banded iron formation, and 7) granitic and leucogranitic mylonite gneiss (Garihan, 1979; Karasevich et al., 1981). In addition, several small (10's-100 m) isolated bodies of ultramafic rock intrude the metamorphic sequence and locally result in contact metamorphism and partial melting of adjacent country rock (Alcock et al., 2006). Our study concentrated on granitic mylonites interlayered in sequences of calcitic marble and amphibolite.

Meso-Microscopic Observations

Field work conducted in the Ruby Mountains involved geologic mapping, structural analysis, and sample collection of mylonitic rocks that occur near the crest of the southern portion of the Ruby range. We were able to differentiate several distinctive lithologic units in the study area including; 1) calcitic-dolomitic marble, 2) biotite and hornblende gneiss, 3) amphibolite, 4) sillimanite pelitic schist, 5) quartzite and 6) granitic and leucogranite mylonites. Isolated pods of ultramafic rock occur as 10-100 m wide bodies intruding a variety of the metamorphic units. Understanding the regional-scale structural relationships is part of on-going research performed by Dr. Krol and his colleague from SUNY-Oneonta. Asymmetric kinematic indicators (Passchier and Simpson, 1996) were used to decipher the movement directions of mylonitic rocks in the ductile shear zone.

The first outcrop examined was a sequence of interlayered calcitic marble and leucogranitic mylonite gneiss (Figure 1). The gneiss contains a strongly mylonitic texture, whereas the marble displays highly contorted and folded calc-silicate layers. The leucogranitic mylonite occur as layers about one meter thick within the encompassing marble layers. The mylonitic foliation strikes N67E and dips 50°NW. A mineral stretching lineation in the mylonite trends due north, and plunges 47°N. Kinematic indicators in the mylonite zone show a strong top-to-the-south or reverse sense of movement in the field. Mineral assemblages in the adjacent marble include calcite, diopside, and graphite. The folded calc-silicate layers of the marble found in this area have axial orientations that are sub-parallel to the lineation in the mylonite. However, their orientations are difficult to measure in the field.

To the east are alternating layers of calcitic marble and more granitic mylonite outcrops (EG-56-07; Figure 2). The mylonite has a foliation striking N70E and dips 40°NW. A mineral lineation trends N15E and plunges 38°N. Kinematic indicators in the form of σ -porphyroclasts reveal oblique top-to-the-south sense (reverse) movement. The mylonite possesses a mineral assemblage which includes; quartz, K-feldspar, biotite, garnet, and kyanite. Kyanite is sub-parallel to the mineral lineation in the mylonite. Structurally below this zone shearing appears to intensify with the development of a stronger, more well-defined foliation. The foliation changes slightly with a strike of N60E and dip of 35°NW and a mineral lineation of N10E, plunging 24°N.

Station EG-2-07s consists of calcite-diopside-biotite marble intruded by an undeformed granitic pegmatite. The marble contains calc-silicate layers that appear much less deformed as previously observed and the pegmatite also shows sign of minor deformation and no effects of mylonitization. However, to the east the pegmatite becomes weakly mylonitized. Also found at

this location are layers of amphibolite which appears to display a mylonitic fabric. The amphibolite has a foliation striking N78E and is dipping 36°NW.

Approximately 1.5 km to the northwest and structurally above the marble unit is station EG-4-07s. The rocks here are dominated by a thick sequence of amphibolite (~7-8 m) interlayered with 0.5-1 m thick layers of granitic mylonite (Figure 3a). The amphibolite also displays a mylonitic texture as well. Foliations strike N60E and dip 35°NW. These rocks also display a well-developed lineation with a trend of N5E, plunging 35°N, which is similar to the orientation observed in the granitic mylonites. The leucogranitic layers contain large, sheared kyanite crystals. Kyanite porphyroclasts are asymmetric and provide evidence for top-to-the north (normal) sense of shear (Figure 3b).

Structurally above the layered amphibolite is a unit of finer-grained, gray hornblende gneiss. The hornblende gneiss also displays the effects of mylonitization showing an oblique, top-to-the-north movement sense (Figure 4). The foliation strikes N65E and dips 35°NW with mineral lineations trending N20E and plunging 30°N.

Metamorphic Conditions

Petrographic analysis of mylonitic rocks reveal mineral assemblages that include; quartz + microcline + plagioclase + garnet ± muscovite ± sillimanite ± kyanite ± biotite (Figure 7). This assemblage is characteristic and indicative of high-grade metamorphism in the upper amphibolite to lower granulite facies. Sillimanite needles and kyanite define the mineral lineation in some of the granitic mylonite indicating they grew contemporaneous with regional deformation and metamorphism. Mineral assemblages indicate P-T conditions reached 7-11 kb and 750-800°C (Figure 8).

Discussion

Several conclusions can be made based upon the field and petrographic observations. Previous work proposed that the mylonites represented several discrete shear zones within a metamorphic sequence of amphibolite, pelitic schist, and calcite marble (Olsen et al., 2007). However, geologic mapping and kinematic analysis during the summer of 2007 indicate the zone of ductile shearing may actually encompass a much broader zone of deformation rather than concentrated along a series of discrete and distinct zones restricted to the granite and leucogranite mylonites. The highly deformed nature of the marble units and the presence of sheath folds with axes sub-parallel to the mylonitic foliation suggest the two are closely related and developed during the same tectonic event(s). Given the rheological and mechanical contrasts between marble and granitic mylonites and similar nature of deformation experienced

by these units, we argue that the zone of movement must be accommodated over a larger, structurally thicker zone and not along thin, isolated zones of highly concentrated shear.

The presence of kyanite and sillimanite, which define the mineral lineation, suggests that the tectonic event responsible for the formation of the ductile shear zones was associated with high-grade metamorphism with pressures of 7-11 kb and temperatures of 750-800°C. The alignment of the sillimanite grains that define the lineation in the granitic mylonite shows that high-grade metamorphism was coeval with ductile shearing and is not an older relict mineral assemblage. The question that still remains is the timing of ductile shearing and the relationship between the two movement episodes as it relates to regional tectonism.

The intriguing observation in the Ruby Mountain shear zones is the preservation of both thrust and normal movement in the same zone. Based upon those observations a two phase tectonic model is developed (Figure 9). The first phase of this model coincides with a time of regional compression creating reverse movement and crustal thickening, some of which was accommodated by the zone of ductile deformation. The second phase of this model represents a period of normal movement within these same zones. This sequence of events is also believed to be the most likely relative age of these two events. One possible explanation for the change from reverse movement to normal movement is in effect, gravity. The compressional phase resulted in an overly thickened crust that ultimately becomes gravitationally and topographically unstable. Therefore, a change in the regional stress field resulted in a change from reverse movement to a normal sense of motion. A modern-day analogue can be seen in the Himalayan Mountains of Pakistan and Nepal (Burchfiel et al., 1992; Krol et al., 1997; Dougherty et al., 1998). There have been several normal faults identified within the mountain range, the most extensive being the South Tibetan Detachment System (Burchfiel et al., 1992). These normal faults have been identified as being contemporaneous with thrusting at depth. Burchfiel et al. (1992) concluded this was due to collapse of high-standing topography driven by gravity. So while shortening was occurring at deeper crustal levels in an overall compressive stress regime, crustal extension was occurring synchronous at higher crustal levels. The result is a mid-crustal wedge that exposes rocks that show both thrust movement at the bottom and extensional movement at the top.

Another possibility for the multiple directions of movement within the same shear zone is the idea that as granitic magma was intruded into the calcitic marble and amphibolite units it thermally weakened the crust resulting in the topographic collapse. Aoya et al. (2005) concluded, based upon U-Pb dating and ⁴⁰Ar-³⁹Ar dating, that the emplacement of a granitic pluton

occurred at the time of the Himalayan Orogeny. He concluded that a transition took place from compressional to extensional movement the same time this pluton intruded, suggesting this was the driving force behind the collapse. This collapse would have caused decompression melting and additional intrusions of granitic magmas, further weakening the overlying crust.

Conclusions

It remains unclear which scenario caused the nearly simultaneous extensional and compressional movement within the ductile shear zone in the southern portion of the Ruby Mountains. This area was initially thought to consist of several small, discrete ductile shear zones restricted to the granitic mylonites, however, recent work suggests the zone of ductile deformation is distributed across a much wider zone. Asymmetric kinematic indicators reveal a predominantly top-to-the-south sense of movement that coincides with regional compression. A transition from reverse (top-to-the-south) to normal movement (top-to-the north) developed in response to gravitational collapse of high topography or collapse driven by thermal weakening of the crust due to granitic intrusions. Additional work is required to distinguish between these possibilities.

Metamorphism of the granitic mylonites and adjacent country rocks indicate pressure and temperatures of 7-11 kb and 750-800°C, respectively. Ductile shearing was coeval with high-grade metamorphism as shown by the alignment of sillimanite needles parallel to the shearing lineation. Based upon regional correlations and similarities with rocks in the Tobacco Root Mountains north of the Ruby range, the shearing event is believed to be linked with the Big Sky Orogeny which took place during the early Proterozoic 1.78 to 1.71 Ga.

Acknowledgements

I would like to thank Dr. Michael Krol for his help and support throughout this process and for giving me this wonderful opportunity. We are extremely grateful to the Adrian Tinsley Program for the financial and personal support that allowed this research to be carried out. Special thanks to co-coordinators Anne Brunjes and Peter Saccocia. Dr. Krol would also like to acknowledge the Center for Advancement for Research & Teaching at Bridgewater State College for supporting various aspects of his research in Montana.

Figure 1. Granitic mylonite outcrop within a sequence of calcitic marble, Elk Gulch quadrangle. View to the east (hammer for scale). Foliation dips to the north (left).

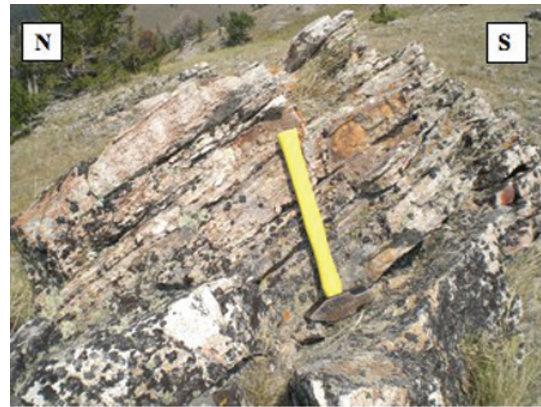


Figure 2. Granitic mylonite interlayered within calcitic marble (pencil for scale).



Figure 3. A) Dark layered amphibolite with thin light colored granitic mylonite zones. The overall shear sense is top-to-the-north. Jess Sousa for scale. B) close-up of asymmetric kyanite (ky) porphyroclast and boudinaged and sheared felsic layer showing top-to-the-north sense of shear.

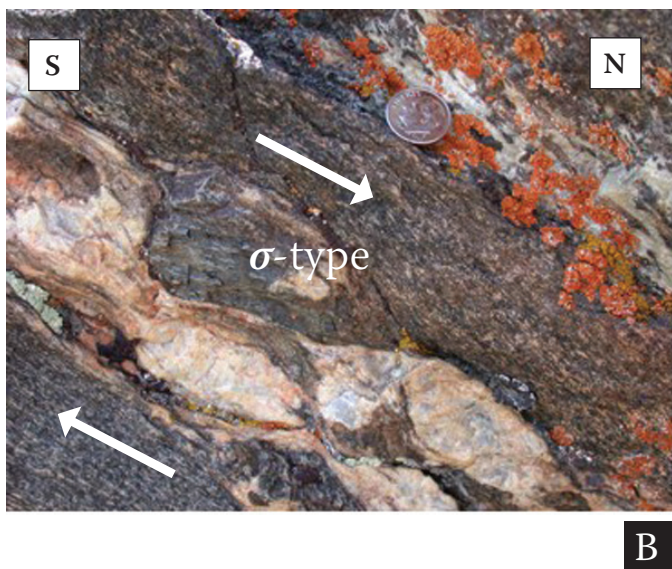


Figure 4. σ -type porphyroclast of feldspar showing top-to-the-north sense of shear. Montana quarter for scale.



Figure 5. Photomicrograph of a σ -type feldspar (Fsp) porphyroclast showing top-to-the-north shear sense in a granitic mylonite. Field of view 2 mm.

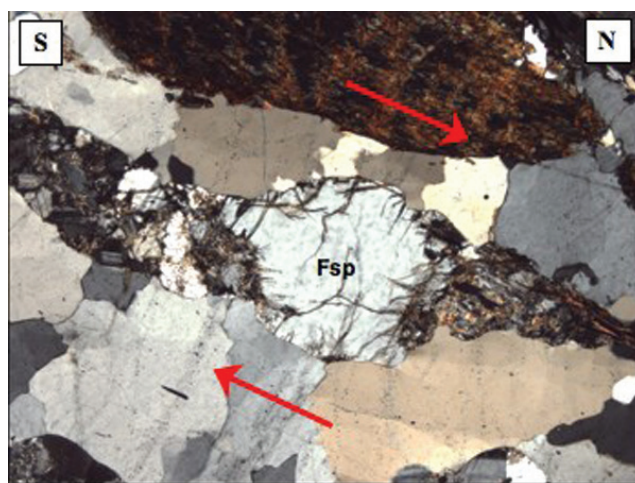


Figure 6. Equal-area stereographic projection of metamorphic and mylonitic fabric elements. Note tight clustering of mineral lineations plunging north.

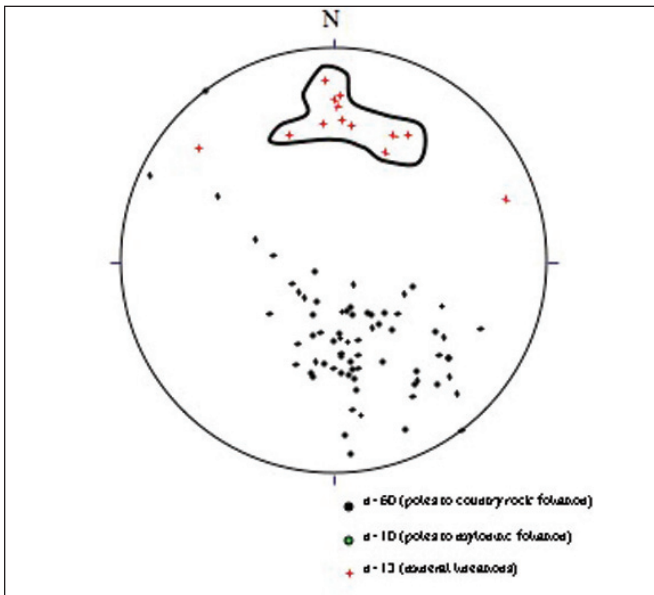


Figure 7. Photomicrograph of sillimanite crystals defining the mineral lineation. Plane polarized light, field of view 4 mm.

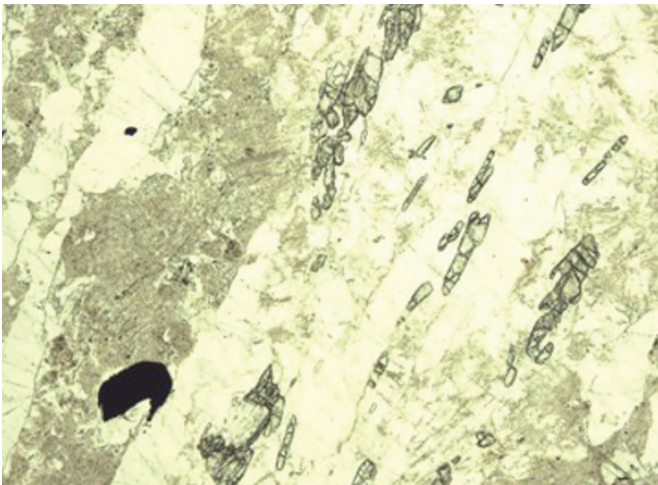


Figure 8. P-T grid showing mineral assemblages and possible P-T conditions during ductile shearing. Gray box shows P-T range of mylonitic rocks.

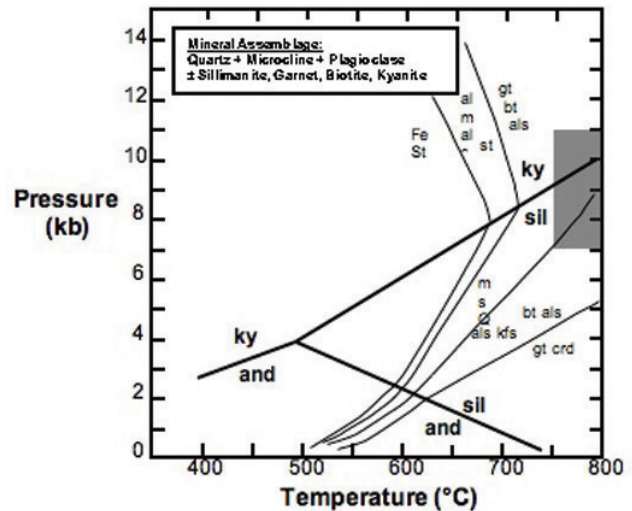
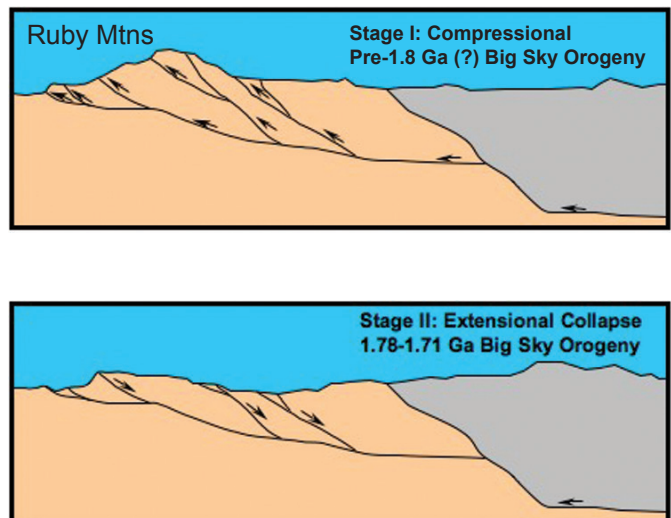


Figure 9. Proposed tectonic model for the development and subsequent collapse of the Ruby Mountains during the 1.78-1.71 Ga Big Sky Orogeny.



References

- Alcock, J., Muller, P.D., and Krol, M.A., 2006, "Contact Metamorphism adjacent to the Paleoproterozoic Wolf Creek Ultramafics, southern Ruby Range, SW Montana, Evidence for Magmatic": *Geological Society of America Abstracts with Programs*, Vol. 38, p. 384.
- Aoya, M., Wallis, S. R., Terada, K., Lee, J., Kawakami, T., Wang, Y., and Heizler, M., 2005, "North-South Extension in the Tibetan Crust Triggered by Granite Emplacement": *Geological Society of America: Geology*, v. 33, p. 835-856.
- Burchfiel, B. C., Zhihliang, C., Hodges, K. V., Yuping, L., Royden, L. H., Changrong, D., and Jiene, X., 1992, "The south Tibetan detachment system, Himalayan orogen: extension contemporaneous with and parallel to shortening in a collisional mountain belt": *Geological Society of America Special Paper* 269, p. 1-41.
- Burger, H. R., 2004, "General geology and tectonic setting of the Tobacco Root Mountains": *Geological Society of America Special Paper* 377, p. 1-14.
- Dougherty, A., Krol, M., Et Hodges, K., 1998, "Miocene tectonic unroofing and cooling of the Greater Himalayan sequence, Nyalam region, southern Tibet": *Geological Society of America Abstracts with Programs*, v. 30, p. 270.
- Garihan, John M., 1979, "Geology and Structure of the Central Ruby Range, Madison County, Montana: Summary": *Geological Society of America Bulletin*, Part 1, v. 90. p. 323-326.
- Harms, T. A., Burger, H. R., Blednick, D. G., Cooper, J. M., King, J. T., Owen, D. R., Lowell, J., Sincock, M. J., Kranenburg, S. R., Pufall, A., and Picornell, C. M., 2004a. "Character and origin of Precambrian fabrics and structures in the Tobacco Root Mountains, Montana": *Geological Society of America Special Paper* 377, p. 203-226.
- Harms, T. A., Brady, J. B., Burger, H. R., and Cheney, J. T., 2004b, "Advances in the geology of the Tobacco Root Mountains, Montana, and their implications for the history of the northern Wyoming province": *Geological Society of America Special Paper* 377, p. 227-243.
- Karasevich, L. P., Garihan, J. M., Dahl P.S., and Okuma, A. F. 1981, "Summary of Precambrian Metamorphic and Structural History, Ruby Range, Southwest Montana": *Montana Geological Society Field Conf.* p. 225-237.
- Krol, M.A., Sherwood, M., Et Dougherty, A., 1999, "Tertiary denudation history of the Indian plate, Naran, Pakistan: Constraints from $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology", *Geological Society of America Abstracts with Programs*, v. 31, p. 29.
- Olsen, R. L., Krol, M. A., Muller, P. D., and Alcock, J., 2007, "Preliminary Kinematic Analysis of Mylonite Zones within the Southern Ruby Mountains, SW Montana: Implications for Regional Proterozoic(?) Tectonic", *Geological Society of America Abstracts with Programs*, Vol. 39, p. 74
- Passchier, C. W., and Simpson, C., 1986, "Porphyroclast System as Kinematic Indicators": *Journal of Structural Geology*, v. 8, p. 831-843.
- Tysdal, Russell G., 1981, "Foreland Deformation in the Northern Part of the Ruby Range of Southwestern Montana": *Montana Geological Society Field Conference*, p. 215-224.

Synthesizing and Characterizing $\text{Sr}_2\text{FeMoO}_6$ Bulk and Thin Films

LOUIS BIANCHINI

Lou is a senior Mathematics major who conducted his research under the mentorship of Dr. Hashini Mohotalla and the funding of an Adrian Tinsley summer grant.

Abstract

A $\text{Sr}_2\text{FeMoO}_6$ (SFMO) pellet was synthesized to use as a target in the Pulsed Laser Deposition (PLD) chamber. The method chosen was a solid state reaction of SrCO_3 , Fe_2O_3 and MoO_3 . All three materials were combined stoichiometrically, ground in a ball mixer, and annealed for 36 hours at 1000°C . A pellet press was custom designed and used to press the annealed powders into a pellet. The magnetic and structural properties of the powder were studied using a Quantum Design MPMS SQUID magnetometer and powder X-Ray diffractometer, respectively. Previous studies of bulk SFMO suggest it to be ferrimagnetic or ferromagnetic, with a magnetic ordering near 400K. The magnetization data completely agrees with the reported data. The 1" diameter pellet was used as a target in the PLD chamber to grow a 200 nm thin film on a SrTiO_3 (001) substrate at 800°C and 10^{-6} torr. X-Ray diffraction was performed on the film to ensure it was epitaxially oriented. From this data, calculations were performed which found the thin film to have been grown epitaxially.

I. Background

A perovskite is a material which has the chemical formula $\text{AA}'\text{O}_3$, where A and A' are both cations, one larger than the other. These compounds have the same structure, called a perovskite structure. A variation on the perovskite formula is the double perovskite, generally $\text{A}_2\text{BB}'\text{O}_6$, where A is Ca, Ba or Sr, B is a 3d transition metal (e.g. Fe), and B' is a 4d transition metal (e.g. Mo). The double perovskite may be thought of as the single perovskites ABO_3 and $\text{AB}'\text{O}_3$ alternating in a 3-D manner. In this research, the compound $\text{Sr}_2\text{FeMoO}_6$ (SFMO) was studied. This material contains the two perovskites SrFeO_3 and SrMoO_3 . Ideally, each Fe perovskite would be surrounded by 6 Mo perovskites and vice versa, which is best shown in Fig. 1. This does not occur, however, as some Mo perovskites can be vacant (that is, they lack only the Mo atom). The Fe perovskites tend not to be found in a vacant state^[3]. Also, the Fe and Mo perovskites have a tendency to swap positions, becoming disordered, even to the point of having completely random positions^[3,4].

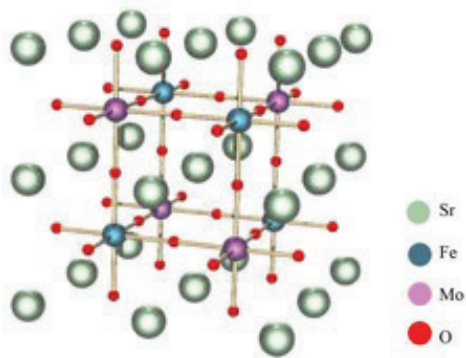


Fig. 1: The double perovskite structure of $\text{Sr}_2\text{FeMoO}_6$. Note that only 8 of the Sr atoms shown have the attached perovskite pictured. The remaining Sr atoms are shown for reference. Most important is the manner in which the Fe and Mo perovskites alternate.

In terms of conductivity, SFMO is a poor metallic conductor. A one inch diameter disc of the material, for example, has a resistance on the order of $10^6 \Omega$, whereas a good conductor would be at least 6 orders of magnitude lower.

There is some debate as to which magnetic ordering SFMO actually possesses. The more popular theory is ferrimagnetic ordering, which is when the Fe and Mo atoms have a magnetic moment pointed in opposite directions, but of unequal magnitude^[2,5,6]. Specifically, it is theorized that Fe has a $+5 \mu_B$ moment while Mo has a $-1 \mu_B$ moment, resulting in a net $+4 \mu_B$ magnetic moment. However, another theory suggests that SFMO has a ferromagnetic ordering, which is when the Fe and Mo atoms have aligned moments^[4,8]. With this assumption, Fe is theorized to have a $+4 \mu_B$ moment while Mo has no moment. The result is equal to the ferromagnetic ordering, that is, a $+4 \mu_B$ magnetic moment. There is considerable difficulty in determining with experimental certainty which ordering is present, but the leading result is ferrimagnetic ordering.

The process of synthesis is detailed in section II. Experiments are in section III, which includes X-Ray Diffraction, SQUID, and the growth of a SFMO thin film. A discussion of our data is in section IV and we conclude our work in section V.

II. Synthesis

Since we had no samples of $\text{Sr}_2\text{FeMoO}_6$ readily available, we had to synthesize the material. After determining the most feasible manner to synthesize SFMO, we decided to use a solid state reaction of SrCO_3 (99.99%), Fe_2O_3 (99.99%), and MoO_3 (99.998%)^[2]. Using the chemical equation $4\text{SrCO}_3 + \text{Fe}_2\text{O}_3 + 2\text{MoO}_3 + \text{H}_2 \rightarrow 2\text{Sr}_2\text{FeMoO}_6 + 4\text{CO}_2 + \text{H}_2\text{O}$ and accounting for the different purity levels, we determined that 8.3773g SrCO_3 , 2.2577 g Fe_2O_3 , and 4.0681 g MoO_3 would be used to give 12.0000 g of SFMO.

These starting materials were ground in a Spex ball mill until well combined. The solid state reaction chosen required a tube furnace to heat these powders to 1000°C for 24 hours, with ramping temperature rates of $1^\circ\text{C}/\text{min}$ in both directions.

The result of the initial annealing showed a distinct change in volume and color of the material. The powders were re-ground at this point as part of the solid state reaction and various experiments were performed with this powder.

Due to the decrease in volume, we decided to produce a second batch of SFMO. The process with the ball mill and tube furnace was repeated. For unknown reasons, a distinct iron oxide appearance was present after annealing in this batch, which was not present in the first batch. Re-annealing at 1000°C for 12 hours removed the iron oxide appearance. Unfortunately, the programming unit on the furnace did not ramp down for the second batch, resulting in a second annealing of 48 hours instead of 12 hours.

Our goal to create a thin film of SFMO required the use of a Pulsed Laser Deposition (PLD) Chamber. The PLD uses a 1 inch diameter pellet of SFMO in order to produce a thin film of SFMO. As the laboratory did not have a 1 inch pellet die kit, we designed a pellet die kit, with assistance from the physics department machine shop at the University of Connecticut. The die kit consists of three basic parts: a base, a body and a plunger. The body was made from a 3" diameter cylinder of 4340 carbon steel with a 1" diameter hole in the center; the base was made from a 2.5 inch diameter cylinder of 1215 low carbon steel with a 1" diameter raised insert made of O1 tool steel, for strength. The plunger was made from 1215 low carbon steel as a handle with an inserted 3" long, 1" diameter O1 tool steel to act as the plunger. Once the body is placed on the base, powder is poured into the body and the plunger is inserted. This entire unit is then placed in a pneumatic pellet press to press the powders into a pellet. We estimated the die kit to be usable at 80,000 lbs force, with the weakest element being the 4340 carbon steel body.

When we pressed the powders at 24,000lbs, they formed a single solid pellet. At lower forces, the pellets were easily broken. This pellet was then transferred onto a fire brick which we pre-shaped to slide into the furnace's ceramic tube. The furnace was programmed to ramp at $1^\circ\text{C}/\text{min}$ to 1200°C , hold for one hour, then ramp down to room temperature. Once completed, we removed the pellet and found the exposed side to be peeling; the side in contact with the firebrick was free of defects.

Shortly thereafter, a SFMO pellet from Dr. B. Dabrowski at Northern Illinois University (NIU) was received. Since this sample was not peeling, it was the sample we ultimately used to make a thin film in the PLD chamber.

III. Experiments

We performed two experiments on the powders, the first being X-Ray Diffraction (XRD) to ensure the correct structure was being formed. The second experiment we performed with a SQUID to investigate the magnetic ordering temperature. The data from the SQUID was also used to determine if the sample was ordered or disordered. We used the pellet in the PLD to grow a thin film, which we then used in a XRD experiment to ensure epitaxial growth.

A. Powder X-Ray Experiments

We performed X-Ray Diffraction on the powders after the initial annealing. As the objective was to determine the structures present in the powders it is necessary to use photons that have a wavelength smaller than the d-spacing (atomic plane separation). This spacing is approximately 79 nm from previously reported data [7], and the X-Rays produced in the diffractometer have a wavelength of 0.154 nm, which makes XRD a very useful atomic-level tool. The choice of photons is ideal since they do not have a charge and are extremely stable and easy to produce. The XRD experiments are entirely based on Bragg's Law, which describes the diffraction of a photon with a crystal lattice structure.

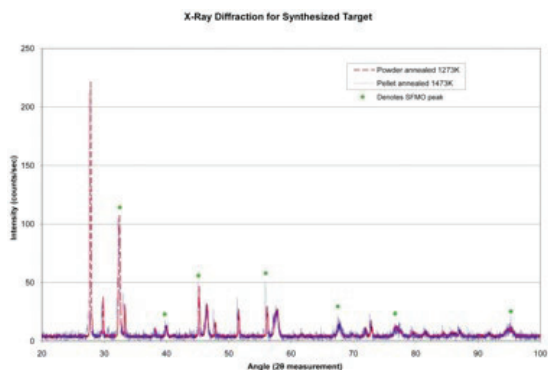


Fig. 2: X-Ray diffraction comparing the powders after a 24 hour and annealing at 1000°C with the pressed powder pellet after the 1200°C annealing.

The green dots indicate a proper structure, as found in [6].

The XRD revealed that all the peaks for SFMO were present, indicating the presence of a SFMO concentration in the powder. However, the additional lines indicate the presence of at least one impurity; SrMoO_4 is reportedly the most likely impurity [2,9].

We also performed XRD on the pellet received from NIU before it was used as the target in the PLD chamber. The result of this experiment is given in Fig. 3, which indicates that only SFMO peaks are present. This indicates a high purity sample, suitable for use as a target to grow thin films.

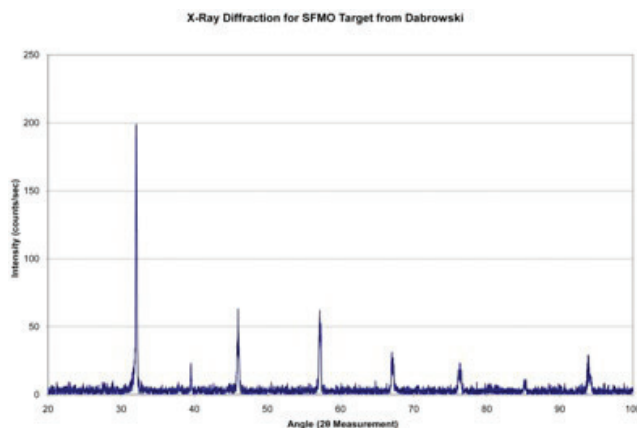


Fig. 3: X-Ray Diffraction experiment performed on the received target from Dr. Dabrowski at Northern Illinois University. Comparing with the green dots in Fig. 2, we see a perfect match. Since there are no extra peaks, we may conclude this sample is a high purity SFMO pellet.

B. Superconducting Quantum Interference Device (SQUID) Experiments

We used a Quantum Design MPMS Superconducting Quantum Interference Device (SQUID) Magnetometer to measure the magnetic moment of the produced powder. Magnetization was measured as a function of temperature over 5 to 350 K. The powder was measured after the second annealing at 1000°C. A highly ordered (> 90%) sample of SFMO should display an abrupt drop in magnetization [2,3]. The data from the SQUID experiment is presented in Fig. 4, which indicates that the sample is relatively disordered, but does not indicate how disordered it is.

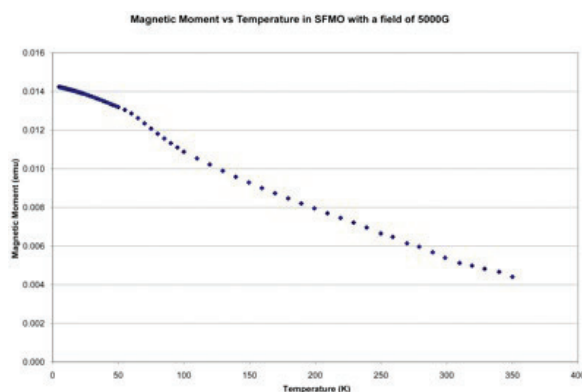


Fig. 4: Magnetic moment measurements taken as a function of temperature under an applied field of 5000G for SFMO powder after a 24 hour and subsequent 12 hour annealing at 1000°C. The relationship between magnetization and temperature is commonly seen in a disordered sample.

The impurity revealed in the XRD experiment could also be affecting the magnetization measurements. It is difficult to determine whether the ordering is ferrimagnetic or ferromagnetic using a SQUID magnetometer. Nevertheless it does measure how strong of a magnetic moment it has.

C. Pulsed Laser Deposition (PLD) Chamber A PLD, shown in Fig. 5, relies on a high-intensity laser to ablate the surface of a solid, causing a plasma plume to form. Inside the plume is the stoichiometric ratio of strontium, iron, molybdenum and oxygen. A mounting plate inside the PLD holds a substrate which the plume deposits onto, forming the thin film. In our case, the substrate was a 1 cm x 1 cm piece of SrTiO_3 oriented in the (001) direction, commonly referred to as STO (001). It was used because it has a close match to the lattice parameters of SFMO. This match is required for SFMO to grow properly on top of the substrate^[5]. Deposition will occur only in a low pressure environment, so the entire metal chamber is held under vacuum during growth.

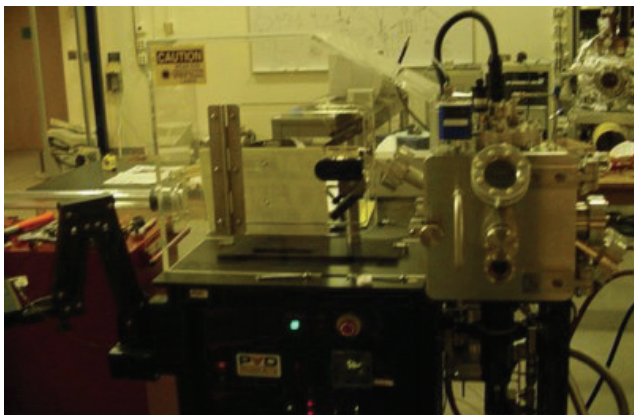


Fig. 5: The Pulsed Laser Deposition (PLD) Chamber. Optical devices are contained inside the chamber, which re-focus the beam into the metal chamber. The beam then hits the target, ablating the surface, and creating the plasma plume which will deposit onto the substrate.

The PLD has several important variables for growth. In the experiment performed, we used the following growth conditions: a substrate temperature of 800°C, a chamber pressure of 10^{-6} torr (1.3×10^{-9} atm), laser energy of 0.252 J with a frequency of 4 Hz and a growth time of 16 minutes. The exposure time varies depending on the required thickness of the film. The entire process takes several hours, as the chamber needs to be brought down to pressure and the substrate needs to heat up.

D. Thin Film X-Ray Experiment

Once we grew the film, we removed the thin film from the mounting plate and checked to see if it was grown properly. This was done with a XRD experiment, but with a different purpose than when performed for the powder. We used XRD on the thin film to determine if it grew with proper orientation. In Fig. 6, our thin film XRD experiment data is presented, in a logarithmic scale for the intensity values. Since the SFMO thin film is approximately 200 nm thick, and the substrate is a ~2 mm thick, it is not surprising that the substrate has a much higher intensity value. As a result, if we presented the data in linear rather than logarithmic, the SFMO peaks would be indistinguishable from background noise. As the peaks present have (002), (005) and (006) Miller Indices, we concluded that this thin film was grown properly.

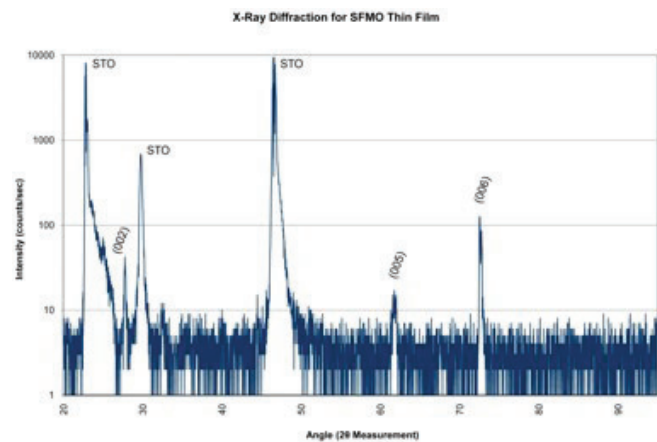


Fig. 6: X-Ray Diffraction performed on the thin film as grown. Note the intensity is in logarithmic scale. Due to the relative thickness of the substrate, we can observe that the largest SFMO peak is approximately 10% of the smallest substrate (STO) peak.

IV. Discussion

Since we did not have data which related a set of 2θ values to Miller Indices for SFMO, we had to compute this data. As we used STO (001) for a substrate, this forced the requirement that any peaks on the XRD experiments be in an (00 l) plane, for an epitaxially grown thin film. We started with Bragg's Law, as it applies to X-Ray Diffraction:

$$n\lambda = 2d \sin \theta \quad (1)$$

Also, using the relationship between the lattice parameters a , b , and c (note that in SFMO, $b = a$ [7]) and the Miller Index (hkl) [1] we know that:

$$d = \frac{1}{\sqrt{\left(\frac{h}{a}\right)^2 + \left(\frac{k}{b}\right)^2 + \left(\frac{l}{c}\right)^2}} \quad (2)$$

Since STO (001) was used for a substrate, the only allowed planes are (00 l) planes, thus $h = k = 0$.

$$d = \frac{1}{\sqrt{\left(\frac{0}{a}\right)^2 + \left(\frac{0}{b}\right)^2 + \left(\frac{l}{c}\right)^2}} = \frac{1}{\sqrt{\left(\frac{l}{c}\right)^2}} = \frac{c}{l} \quad (3)$$

We replaced d from (3) into (1) and set $n = 1$, as is commonly done, to yield:

$$\lambda = \frac{2c \sin \theta}{l} \quad (4)$$

At this point the variable λ , wavelength of the incident photon, is a known value that is specific to the X-Ray Diffractometer, in our case 15.41 nm. Also, c is a known value from previously reported data and measured as 78.949 nm [7]. To determine if a specific angle measurement is a (00 l) peak, we solved for the angle. Observing that the X-Ray Diffractometer actually measures 2θ :

$$\frac{\lambda l}{2c} = \sin\left(\frac{2\theta}{2}\right)$$

$$2\sin^{-1}\left(\frac{\lambda l}{2c}\right) = 2\theta = \frac{360}{\pi} \sin^{-1}\left(\frac{\lambda l}{2c}\right) \quad (5)$$

The final step in equation (5) is to convert from radians to degrees. With equation (5), it is easy to see if a peak is a (00 l) peak or not. Since l is an integer, we evaluated for each l value starting at 1 until the inverse sine function was no longer defined. From this, we obtained a complete set of data relating 2θ to (00 l) Miller Indices.

Any peaks that occur which do not appear on the list are a sign of a poorly grown thin film. If, however, every peak that occurs is the result of a (00 l) peak, then we have shown epitaxial growth. This indicates that the thin film is of high quality, and has proper orientation. As the thin film produced yielded (002), (005) and (006) peaks, it was found to have been properly grown.

V. Conclusion

The $\text{Sr}_2\text{FeMoO}_6$ material was somewhat successfully synthesized. An impurity was found to exist in the powders, which remained through to the produced pellet. In addition, the pellet exhibited a peeling surface. As such, a sample from NIU was received with time to perform X-Ray Diffraction, which revealed high purity, and was in good physical condition. The thin film that was produced was found to have been successfully grown, as confirmed by the X-Ray Diffraction experiment.

At this point, the end of the research project was reached. The biggest goal that remained unfinished was performing the Spin-Resolved Photoelectron Emission Microscopy (Spin-Resolved PEEM) and resistance experiments. These experiments would show direct proof of whether or not the SFMO thin film had a half-metallic nature, which would indicate that it has some rare properties – such as Colossal Magnetoresistance. With confirmation of a half-metallic nature SFMO could be used in quantum devices, spintronics or advanced data storage devices.

Acknowledgements

A special thanks to the Adrian Tinsley Project, my mentors Dr. Hashini Mohottala at Bridgewater State College and Dr. Boris Sinkovic at the University of Connecticut. Also, a special thanks to Dr. B. Dabrowski at Northern Illinois University for providing the pellet used to grow the thin film.

Hashini Mohottala at Bridgewater State College and Dr. Boris Sinkovic at the University of Connecticut. Also, a special thanks to Dr. B. Dabrowski at Northern Illinois University for providing the pellet used to grow the thin film.

Resources

- 1] Kittel, Charles. Introduction to Solid State Physics. Hoboken, NJ: John Wiley & Sons, 2005.
- [2] O. Chmaissem, R. Kruk, B. Dabrowski et. al., Structural phase transition and the electronic and magnetic ordering properties of $\text{Sr}_2\text{FeMoO}_6$, Phys. Rev. B 62.14197 (2004).
- [3] D. Sanchez, J. A. Alonso, M. Garcia-Hernandez, et. al., Origin of neutron magnetic scattering in antisite-disordered $\text{Sr}_2\text{FeMoO}_6$ double perovskites, Phys. Rev. B 65.104426 (2002).
- [4] L. Balcells, J. Navarro, M. Bibes, et. al., Catatonic ordering control of magnetization in $\text{Sr}_2\text{FeMoO}_6$ double perovskite, Applied Phys. Lett. 78, 6 (2001).
- [5] T. Manako, M. Izumi, Y. Konishi et. al., Epitaxial thin films of ordered doubled perovskite $\text{Sr}_2\text{FeMoO}_6$, Applied Phys. Lett. 74, 15 (1999).
- [6] K. I. Kobayashi, T. Kimura, H. Sawada, et. al., Room-temperature Magnetoresistance in an oxide material with an ordered double-perovskite structure, Nature 395 (1998).
- [7] D. D. Sarma, E. V. Sampathkumaran, S. Ray, et. al., Magnetoresistance in ordered and disordered double perovskite oxide $\text{Sr}_2\text{FeMoO}_6$, Solid State Communication 114, 465 (2000).
- [8] B. Garcia-Landa, C. Ritter, M. R. Ibarra, et. al., Magnetic and magnetotransport properties of the ordered perovskite $\text{Sr}_2\text{FeMoO}_6$, Solid State Communications 110, 435 (1999).
- [9] Y. H. Huang, M. Karppinen, H. Yamauchi, et. al., Systematic studies on effects of cationic ordering on structural and magnetic properties in $\text{Sr}_2\text{FeMoO}_6$, Phys. Rev. B 73.104408 (2006).

Synthesis of Phenoxides with Pendant Amines and Catalytic Intramolecular Hydroaminations

KENNETH AWASUNG

Kenneth is a senior Chemistry major who conducted his research under the mentorship of Dr. Stephen Waratuke. He presented his research at the 2008 National meeting of the American Chemical Society in New Orleans. This work is part of an honors thesis which will be defended in April of 2008.

Abstract

One core focus of my research project, (my 2007 summer research) is to make structural analogs of substituted phenols to support the titanium catalysis of organic compounds. The synthesis and study of these and related ligands, (pyrrolys, aldimines, salens, and other nitrogen/oxygen heterocycles) is a major field of organometallic chemistry. Bulky phenols and their analogs serve as highly effective ligands to support catalysis due to their sterics and electronics.¹ I have been designing and have begun synthesizing phenol analogs using a series of aldol condensations and Michael additions and other organic chemistry methodology to generate new substituted phenols. Our method is centered on the synthesis of known phenols and I have worked on the generation of four modified phenols that would represent novel compounds and could serve as ligands to enable transition metal catalysis for a broad range of chemical reactions.²

My second core focus has been to develop known and novel phenol compounds to serve as catalysts for a specific type of hydroamination reaction. In my current honors thesis work I am exploring the usage of titanium phenoxide catalyzed intra-molecular hydroaminations of amino alkenes. My progress on phenoxide ligand synthesis, intra-molecular hydroaminations, and their planned combination represent my ongoing exploration of these three phases that has evolved over the last 3 years of my collaborative undergraduate research with Professor Waratuke and my fellow group members. This paper serves as a preliminary report of our work and the prospective of my senior thesis, (Spring 2008).

Introduction

The regio-selective and stereo-selective coupling of organic molecules can often best be achieved at reasonable conditions and yields using early transition metal catalysts which contain bulky electron donating oxygen and nitrogen functionalities. In our research group we are specifically interested in the usage and synthesis of titanium phenoxide type compounds to catalyze a range of hydroamination reactions. The sub-field of asymmetric catalysis within organometallic chemistry has grown substantially over the last decade and has been recognized widely by chemists and science in general as a highly versatile and practical methodology for cleanly synthesizing more complex organic molecules. The 2001 Nobel Prize in chemistry was awarded to Knowles,

Noyori, and Sharpless for their work in the field of catalytic asymmetric synthesis. The products of these types of catalytic reactions can then be used for an entire spectrum of applications ranging from academics to commercial usage as building blocks for other molecules. For example in the pharmaceutical industry, the synthesis of many blockbuster drugs involve multiple synthetic steps and require some type of catalytic methodology to ensure that several key reaction steps generate the correct three dimensional reaction product, (enantiomeric excess), at an acceptable high yield. Often these three-dimensional products and “unwanted by-products” will have vastly different reactivity with biological systems and can be serious health hazards if they are present as impurities in a marketed drug. Many of the recent asymmetric catalysis publications also make note of the sustainable nature of these methods as they often strive to incorporate 100% atom economy into the desired reaction products.

Early transition metals have found utility as powerful asymmetric catalysts capable of yielding more complex organic products with a high efficiency and control. This has been accomplished for a rapidly growing number of titanium and zirconium catalysts supported with pyrrols, salens, aldimines, and phenols as ancillary ligands.³ The metal centers are known to be sufficiently lewis acidic to bind with the pi bonds of organic molecules and the lone pairs of oxygen and nitrogen functionalities. In order for the metal center to “perform catalysis” the usage of an ancillary ligand that is sufficiently bulky and electron donating is crucial. A catalyst comprised of the needed arrangement of sterics and electronics will be able to temporarily bind to organic substrates, perform sigma bond formation on the substrates in a highly specific manner, and then release the substrate in order for the catalyst to begin the cycle anew on the next round of substrates. (This is commonly referred to as a catalytic cycle).

Considering the massive complexity of organic molecules and the potential organometallic applications, it is not surprising that no one catalyst can serve all applications. Within very specific sub-applications such as the intra-molecular hydroamination of amino alkenes, even the most promising catalysts range in performance depending on the exact substrate. There is still a great deal of scope to develop catalysts capable of broader usage, catalysts that are more effective for highly specialized usage, and to better understand how these catalysts work on the molecular level.

Background of ligand models and hydroamination chemistry

A large number of Schiff base type compounds have shown significant promise for supporting early transition metal catalysis especially. Of specific interest to our group are the nitrogen and oxygen heterocycle titanium compounds, (Figure 1), that have been found to be especially useful for performing and understanding a range of catalytic hydroaminations of unsaturated compounds with amines. In considering the three titanium compounds, each has multi-dentate electron donating ligands that enable the catalyst and the probable catalytic species of a cycle to fluctuate and enable bond formation and breakage to generate hydroamination products. It is important to realize that the catalyst structures have been drawn using ChemDraw software and do not accurately represent the most correct

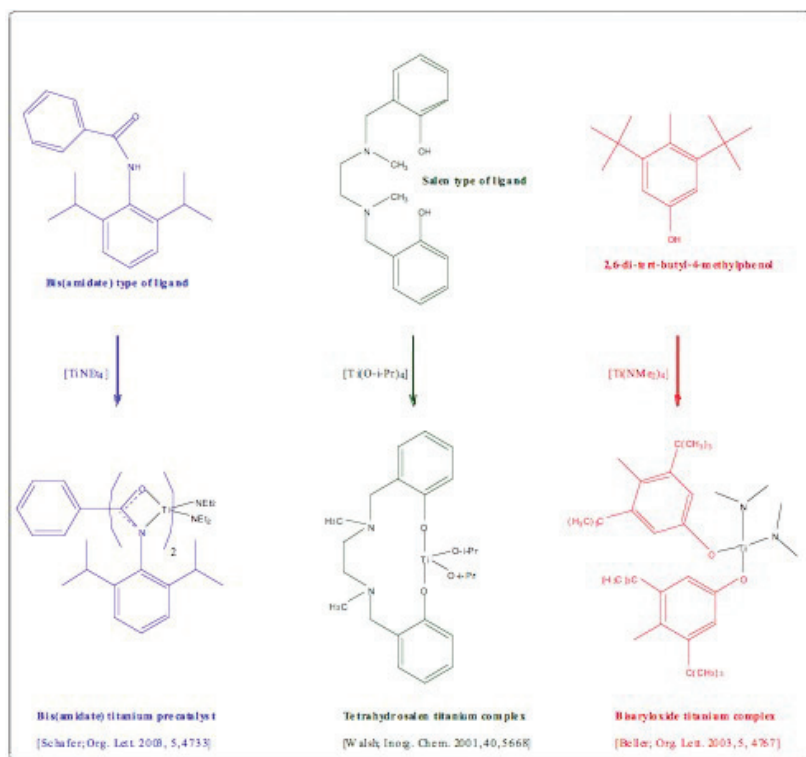


Figure 1 (Examples of nitrogen and oxygen containing ligands bound and unbound to titanium)

depictions of these compounds. These structures have been reported in the solid state as X-ray crystal structure and these are contained within the appropriate references. Also of note is that once these catalysts are subjected to solvent, reagents, and begin to perform catalysis, a great deal is unknown about the true nature of the actual structure of these compounds.

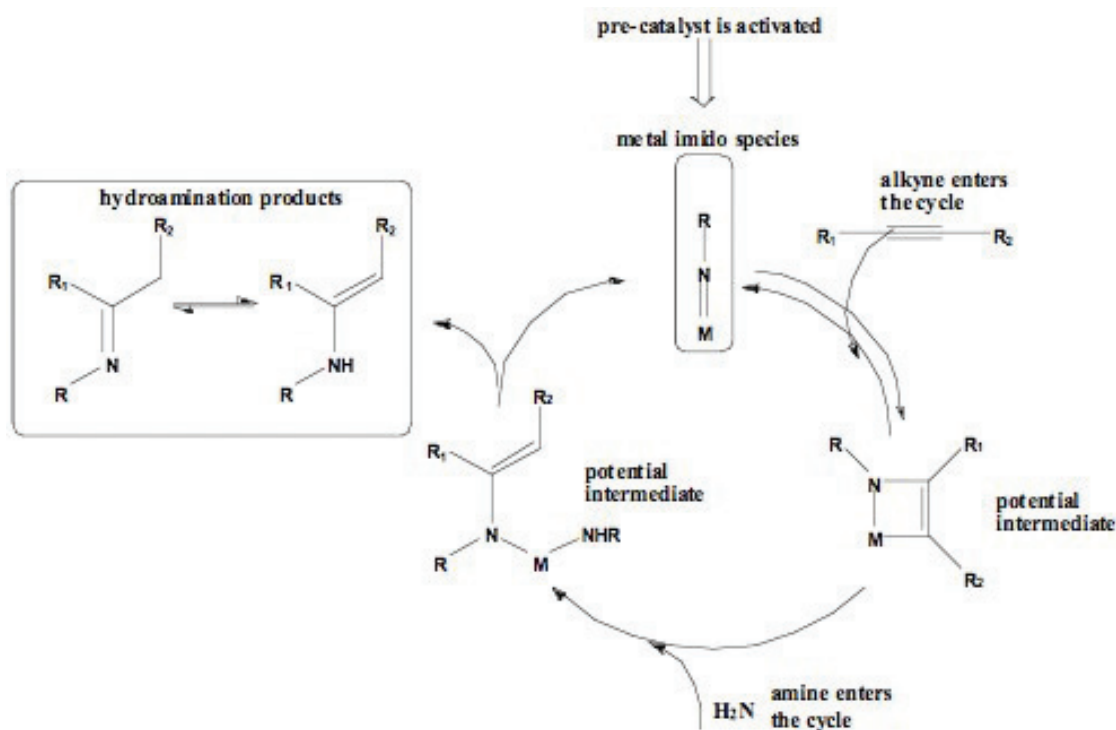


Figure 2 (A general scheme for a [2+2] catalytic hydroamination cycle)

A number of key studies by the groups of Bergman, Beller, Hartwig, Odom and many others have established some of the critical parameters that must be present in order for the above and related titanium catalysts to perform hydroamination reactions.⁴ This in turn enables researchers such as us to better understand and design our catalytic reactions. The use of titanium aryloxide as coupling catalysts for alkenes and alkynes was the focus of Professor Waratuke's graduate work⁵ and has grown into studying their application towards hydroamination reactions. In a hydroamination reaction, an amine and an unsaturated hydrocarbon are coupled in a specific manner such that a nitrogen of the amine adds to one carbon and a hydrogen of the amine adds to another carbon of the pi bond of the hydrocarbon. In several seminal papers by Bergman, a key imido intermediate, kinetic studies, and support for a [2 + 2] cycloaddition catalytic cycle was presented and is shown below in Figure 2

Results and Discussion

My initial research in the group has been based on making phenols and similar organic compounds (salens and tripodal amines) using standard organic laboratory methods and spectral analysis. This has enabled me to explore the novel synthesis phenol molecules with substituents that have a basic nitrogen functionality. A sterically demanding phenol with a bidentate ability would alter both the overall sterics and electronics of the catalyst and its ability to perform a wide-range of catalysis of organic compounds. There is precedence in the literature for related cyclopentadienyl and indenyl ligands with pendant amine groups.⁶ I have been focused on a group of four modified phenol targets each of which share a synthetic approach that is based upon the synthesis of 2,3,5,6-tetraphenylphenol from the literature.⁷ The overall synthesis involves aldol condensations and michael addition reactions that are taught in the sophomore organic course and are ubiquitous throughout the organic chemistry literature. An aldol condensation is an organic reaction where an enolate ion reacts with a carbonyl compound to form a β -hydroxyaldehyde or β -hydroxyketone followed by dehydration to a conjugated enone. The result of an aldol condensation is the production of a more complex alpha,beta-unsaturated carbonyl. During this reaction, water is eliminated upon treatment of two

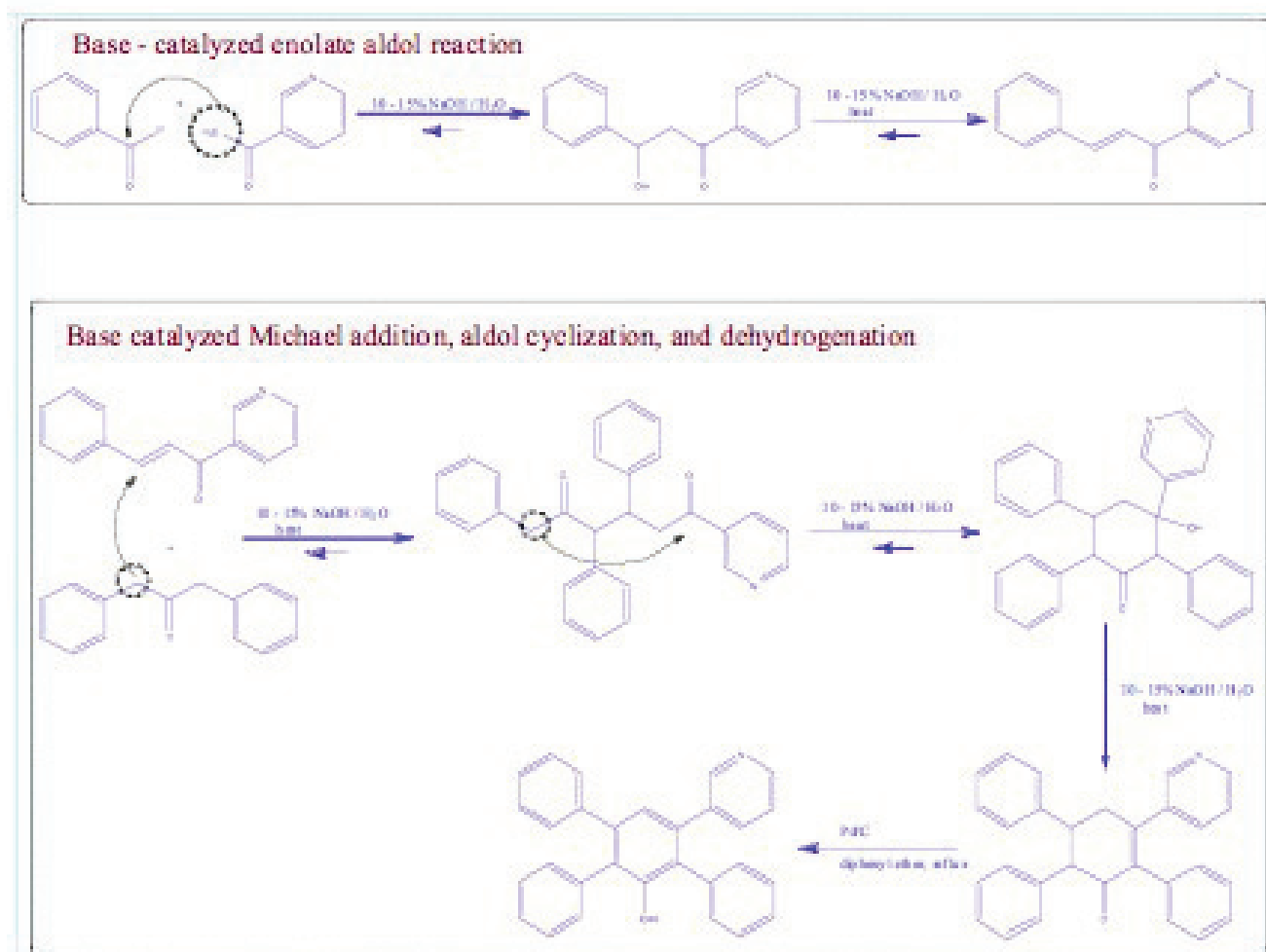
equivalents of a carbonyl with acid or base. A Michael addition is the nucleophilic addition of a carbanion to an α , β unsaturated carbonyl compound. This is known as a conjugate addition and is one of the most useful methods for the mild formation of C-C bonds. Having the optimal base concentration and heat conditions will drive the reaction forward. The dilute moderate base NaOH is used with mild heat. In my current project the synthetic mechanism involves a series of steps which are all in equilibrium. By using the optimal base concentration, and isolating the reaction products, the overall reaction synthesis can be pushed forward. In this section, I will present the reaction methodology, analysis data, and the experimentals for these bidentate phenols

Phenoxide Synthesis

In general this reaction begins with an aldol condensation to

generate an α , β -unsaturated ketone. The next step involves a base catalyzed Michael addition followed by an intra-molecular aldol reaction and base catalyzed dehydration to generate the next intermediate product. This is all done in the same reaction vessel under the same conditions (dilute sodium ethoxide base, ethanol, and heat). Finally, a dehydrogenation in diphenyl ether at elevated temperature using Pd/C is used to generate the substituted phenol. This was performed using 4 different ketones with the goal of generating 4 different bidentate phenoxides. The overall reaction scheme is represented in Figure 3.

Figure 3 (General phenoxide synthesis scheme)



Due to the likely presence of equilibrium species and lack of purification in the early reaction stages, I have had to be resourceful to move these reactions forward for the 4 modified phenols. The procedure used for my experiments was adapted from the text *Introduction to Organic laboratory technique, experiments 41 and 42*. This is the laboratory book used in our current organic Lab courses. The experiment was modified by scaling up forty times and using a variable ketone reagent. This phase of my project is on-going and if completely successful will be incorporated into the catalytic work. The details of the phenoxide synthesis can be found in the contained experimental section.

The catalytic portion of my research project and senior thesis is centered on developing a titanium phenoxide catalyst that will best facilitate the intra-molecular hydroamination reaction in figure 4. There are a range of titanium based catalysts that have been reported in the literature to be effective for these types of aminoalkene substrates.⁸

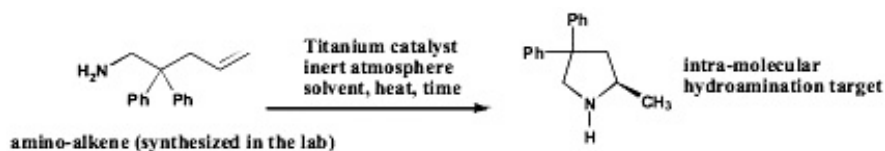


Figure 4 (example of an intra-molecular hydroamination)

The reaction above requires a great deal of preparation and lab work. The aminoalkene reagent and others under consideration require synthesis, the hydroamination reaction protocols must be established, and the product isolation and characterization must take place. I have just completed the synthesis of the 2,2-diphenyl-4-penten-1-amine and will be commencing catalysis studies shortly. The synthesis and spectral data can be found in the experimental section.

Experimental

(For specific spectra data or information please contact Steve Waratuke at swaratuke@bridgew.edu)

The chemical reagents: benzaldehyde, acetophenone, 3-aminoacetophenone, 4-aminoacetophenone, 3-acetylpyridine, and 4-acetylpyridine, as well as ethanol, ether and sodium hydroxide solutions, were purchased from commercial supplies. A solvent purification system was used to store the solvents THF and toluene in a pure form and under reduced pressure. These solvents were further distilled before their use in the reactions. N-butyl lithium solution was purchased as a 1.0 M solution in hexanes. The solutions containing the crude products were

concentrated down by the use of a rotor vacuum pump and under reduced pressure. A 400 MHz NMR spectrometer was used to produce ¹H and ¹³C spectra. Most moisture sensitive reactions were performed in a MBraun dry box and/or under a positive argon flow, using a dual vacuum/inert gas line.

Phenoxide constructed of acetophenone and benzaldehyde

Benzaldehyde (6 g, 57 mmol), acetophenone (6.59 mL, 57 mmol) and 32 mL of 95% ethanol were combined in a 250 mL round bottom flask and stirred for 30 minutes. Then 4 mL of a 0.6% w/v NaOH was added to the reaction mixture. A color change was observed from transparent to yellow upon the addition of the base. The reaction mixture was then allowed to sit at room temperature for 15 minutes and 5 mL of ice water added to the vessel. The precipitate formed was filtered by Hirsch funnel filtration techniques, resulting in a crude product yield of 11.09 g. This crude "chalcone-like" compound was put on the Schlenk line overnight to evaporate any residual water. After 24 hours or drying, the mass of the dried product was determined to be 8.86 g. The compound was characterized by Infrared spectroscopy (IR) and Nuclear Magnetic Resonance spectroscopy (NMR).

The next synthetic step involved the preparation of an α,β -unsaturated ketone by the reaction of the previously synthesized "chalcone-like" product with 1,3-

diphenylacetone (8.078 g, 38 mmol) in a 250 mL conical flask. 20 mL of absolute ethanol (200 proof) and 10mL of a 2M NaOH solution were then added into the vessel and allowed to gently boil for 15 minutes. The reaction mixture was subsequently refluxed for two hours producing a dark green liquid and a white suspension at the bottom of the flask. After utilizing various crystallization techniques, the total product obtained weighed 15.01 g. However, this product still contained impurities such as carbonates and hydroxides from the original use of NaOH as a catalyst. Acetone was used as a suitable solvent for the extraction of these inorganic impurities. Upon centrifugation, the supernatant was poured off and concentrated by using a rotary evaporator. The mass of the solid purified product was 14.48 g, with a melting point range from 153 °C – 154.3 °C.

Phenoxide constructed of 3-aminoacetophenone and 4-aminoacetophenone and benzaldehyde

benzaldehyde (6 g, 57 mmol), 4-aminoacetophenone (7.7 g, 57 mmol) and 32 mL of 95% ethanol were combined in a 250 mL round bottom flask and stirred for 30 minutes. 4 mL of a 0.6% w/v NaOH was added and the reaction mixture turned slowly from light yellow to a dark red solution (this color change varies with each ketone). Then 10 mL of ice water was added and the crude "chalcone-like" product precipitate was collected by Hirsch filtration to yield 11.65 g of crude chalcone-like product. The α,β -unsaturated chalcone-like product (8.67 g, 38.8 mmol) is then reacted with 1,3-diphenylacetone (8.16 g, 38.8 mmol) in 20 mL of a 200 proof ethanol solution and 10 mL of 2M NaOH. The mixture was then refluxed for 2 hours during which the color becomes a dark green with a solid suspension. Water is then added to increase the amount of crude solid and a series of extractions are done using ethanol and methylene chloride which yields a green powder (0.84 g, 2 mmol) this has been characterized by ^1H and ^{13}C NMR.

Phenoxide constructed of 3-acetylpyridine and 4-acetylpyridine and benzaldehyde

Benzaldehyde (6 g, 57 mmol), 4-acetyl pyridine (2.72 mL, 24 mmol) and 32 mL of 95% ethanol were combined in a 250mL round bottom flask and stirred for 30 minutes using a micro spatula. 4 mL of a 0.6% w/v NaOH was added and the reaction mixture turned from yellow into a bright orange liquid. 5 mL of ice water was added into the flask and a cloudy light green precipitate was formed. The crude product was filtered using a Hirsch funnel and the compound had a mass of 11.31 g. This "muddy" chalcone was stored overnight in the refrigerator to facilitate crystallization. The reaction mixture was refluxed for two hours and allowed to cool at room temperature. Instead of a fine crystalline compound, an oily sticky compound was precipitated. Several attempts using extraction solvents such as methylene chloride and other crystallization techniques like the rotary evaporator were unsuccessful. My mentor and I resorted to using a column. A dry product was finally obtained and the mass was determined to be 4.12 g. This was a very low percent yield but was sufficient to continue with the next synthetic step which was reacting this compound with 1,3-diphenylacetone (4.70 g, 22 mmol). 50 mL of absolute ethanol and 2.5 mL of a 2.2 M NaOH were added and the reaction mixture was allowed to reflux for 2 hours then left to cool. The purified product from 3-acetylpyridine (2.986 g, 84% yield) and from 4-acetylpyridine (2.71 g, 76% yield) were extracted by Hirsch filtration and the mass was determined as 1.96 g. This compound was characterized by IR

and NMR.

Synthesis of 2,2-diphenyl-4-penetenenitrile

The experiment was scaled down a fourth from the literatures in (Marks, *J. Am. Chem. Soc.* 2003, 14773). N-butyl lithium (16 mL of a 1.6 M solution in hexanes, 26 mmol) and THF (30 mL) at -78°C under Argon atmosphere were charged into a 250mL Schlenk flask. Distilled diisopropylamine (3.5 mL, 26 mmol) was slowly added to the mixture and stirred for a half hour at -78°C and in a dry ice and acetone bath. Diphenylacetone (4.7 g, 24.5 mmol) was then added and the mixture allowed to warm to 0°C while stirring for an hour. Allyl bromide (4.3 mL, 25 mmol) was then added and the mixture stirred for three hours at room temperature. 25 mL of distilled water was used to quench the reaction and then the resulting phases were separated. Solutions of Et_2O (2 x 25 mL), water (25 mL), saturated aqueous NH_4Cl (2 x 25 mL) and brine (25 mL), were used to wash the organic layer. The final solution was dried over MgSO_4 and then filtered by Hirsch funnel technique. The resulting solution was concentrated down under reduced pressure. A crude yellow product of was obtained 2,2-diphenyl-4-penetenenitrile (9.57 g, 41 mmol, 89% yield). This crude product was characterized using a 400 MHz NMR spectrometer to obtain the ^1H and ^{13}C spectra. ^1H NMR (400 MHz, CDCl_3) δ 7.7 – 7.3 (m, 10H), 5.8 – 5.6 (m, 1H), 5.2 – 4.9 (d, 2H), 4.0 – 3.7 (d, 2H). ^{13}C NMR (400 MHz, CDCl_3) δ 139.6, 131.7, 129.1, 128.7, 127.8, 126.93, 121.85, 120.30, 77.00, 51.61, 43.8.

Synthesis of 2,2-diphenyl-4-penetene-1-amine

The experiment was scaled down a fourth from the literatures in (Marks, *J. Am. Chem. Soc.* 2003, 14773). To a stirred mixture of LiAlH_4 (0.4 g, 10 mmol) in Et_2O (20 mL) at 0°C under argon was gradually added a solution of 2,2-diphenyl-4-pentenitrile (9.57 g, 41 mmol) in diethyl ether (Et_2O). The reaction was allowed to warm to room temperature and stirred for five hours. Et_2O (25 mL) was used to dilute the mixture and sequential addition of water (0.5 ml), 15% $\text{NaOH}_{(\text{aq})}$ (0.4 ml) and water (2 ml) were used to quench the reaction. The filtrate was dried over anhydrous Na_2SO_4 and the precipitate was filtered off by Hirsch funnel filtration. The resulting solution was concentrated using a rotor vacuum pump. The crude amine (4.72 g, 83% yield) had a characteristic fish-like smell and was colorless oil. A proton and carbon-13 NMR analysis were done for characterization of the product. The NMR solvent used was chloroform- D . ^1H NMR (400 MHz, CDCl_3) δ 7.4-7.29 (m, 4H), 7.23-7.10 (m, 6H), 5.48-5.07 (m, 2H), 4.96(d, 1H), 3.37 (s, 2H), 2.06-2.62 (d, 2H), 1.26 (s, 2H). ^{13}C NMR (400 MHz, CDCl_3) δ 144.6, 134.1, 128.18, 128.04, 77.31, 77.00, 76.67.

Discussion

The four different precursors to the phenoxide ligands have been successfully synthesized. However, the purity of the products is compromised in the later steps of the synthesis. This has led to the need to use new extraction techniques in order to obtain fine crystals of the desired product. The presence of some impurities is uttered by the formation of an oily suspension. These rudimentary mixtures were obtained in a crude oily form but were however purified by the use of a separating funnel and appropriate solvents such as ethanol and methylene chloride. Hence, my mentor and I have been working on ways to extract the product from these inorganic impurities related to conditions, likely by-products, and reversibility of the overall reaction. We also plan to evaluate other methods of performing the last synthetic step to achieve the aromatic phenols. Subsequently, once the synthesis of these modified phenols has been finished, we intend to react them with titanium tetrachloride in reducing conditions, to generate novel titanium compounds. Future studies would include exploring the catalytic abilities of these new compounds. The intra-molecular hydroamination work that I have begun to work on has proceeded smoothly as I have been able to prepare the aminoalkene 2,2-diphenyl-4-penten-1-amine to serve as a catalytic substrate. I intend to catalyze the cyclization of this aminoalkene using titanium aryl oxides and expand this reaction to consider a range of amino alkenes and phenoxide ligands (off the shelf and novel) catalyzed hydroaminations including intra-molecular hydroamination reactions of amino-alkenes. These catalytic products are of particular interest as they can contain 5 and 6 membered rings that when cyclized by intra-molecular hydroamination have a specific regio- and stereo-selective formation. This enables the clean formation of desirable reaction products and is a highly desirable method sought by the fine chemical and pharmaceutical drug synthesis industries as well as many chemists studying fundamental reaction chemistry.

Acknowledgement

The Author would like to thank the Adrian Tinsley Program for providing the funding for his research through the summer Grant Program.

Resources

- 1 (a) D.C. Bradley; R. C. Mehrota; I.P. Rothwell; A. Singh; *Alkoxo and Aryloxo Derivatives of Metals*, Academic Press, London, 2001.
2. K. Awasung, Summer ATP "Organic ligand synthesis and intra-molecular hydroamination reactions"
3. (a) Cao, Y. Shi, A.L. Odom; *J. Am. Chem. Soc.* 2003, 125, 2880. (b) Y. Shi, C. Cao, A.L. Odom; *Inorg. Chem.* 2004, 43, 1, 275. (c) Y. Li, Y. Shi, A.L. Odom; *J. Am. Chem. Soc.* 2004, 126, 1794. (d) L. Schafer; *Organomet.* 2006, 25, 5249. (e) L. Schafer; *Org. Lett.* 2003, 5, 4733 (f) J. Bexrud, J. Beard, D. Leitch, L. Schafer; *Org. Lett.* 2005, 7, 1959. (g) V. Khedkar, A. Tillack, M. Beller; *Org. Lett.* 2003, 5, 25, 4767. (h) Bytchkov, S. Doye; *Tett. Lett.* 2002, 43, 3715 (i) Pohlki, S. Doye; *Angew. Chem. Int. Ed.* 2001, 40, 12, 2305. (j) F. Pohlki, S. Doye; *Chem. Soc. Rev.* 2003, 32, 104.
- (k) Haak, E.; Bytchkov, I.; S. Doye; *Angew. Chemie. Int. Ed.* 1999, 38, 22, 3389. (l) T.J. Davis, P. Carroll, P.J. Walsh; *Organomet.* 2000, 19, 4840.
4. (a) A. Odom; *Dalt. Trans.* 2005, 225. (b) A. Odom; *Organomet.* 2006, 25, 6125. (c) L. Ackermann, R.G. Bergman, R. Loy; *J. Am. Chem. Soc.* 2003, 125, 11956. (d) L. Ackermann, R.G. Bergman; *Org. Lett.* 2002, 4, 9, 1475. (e) D. Watson, M. Chiu, R. Bergman; *Organomet.* 2006, 25, 4731 (f) J.S. Johnson; R.G. Bergman; *J. Am. Chem. Soc.* 2001, 123, 2923. (g) A.M. Barranger, P.J. Walsh, R.G. Bergman; *J. Am. Chem. Soc.* 1993, 115, 2753. (h) P.J. Walsh, A.M. Barranger, R.G. Bergman; *J. Am. Chem. Soc.* 1992, 114, 1708. (i) O. Lober, M. Kawatsura, J.F. Hartwig; *J. Am. Chem. Soc.* 2001, 123, 4366. (j) J. Pawlas, Y. Nakao, M. Kawatsura, J.F. Hartwig; *J. Am. Chem. Soc.* 2002, 124, 3669. (l) J. Louie, M.S. Driver, B.C. Hamann, J.F. Hartwig; *J. Org. Chem.* 1997, 62, 1268. (m) Beller et. al. *Chem. Eur. J.* 2004, 10, 2409
5. (a) S. A. Waratuke, M. G. Thorn, I. P. Rothwell; *J. Am. Chem. Soc.*, 1999, 121, 9111. (b) J. E. Hill, M. G. Thorn, S. A. Waratuke, E. S. Johnson, I. P. Rothwell; *J. Am. Chem. Soc.*, 1997, 119, 8630. (c) S. A. Waratuke, E. S. Johnson, M. G. Thorn, I. P. Rothwell; *Chem. Commun.*, 1996, 2617.
6. (a) Rausch et. Al. *Organomet.* 1998, 3775. (b) Esteruelas et. al. *Organomet.* 2007, 554.
7. (a) Rothwell, et.al. *J. Chem. Soc. Dalt. Trans.* 2002, 3398. (b) L.D. Durfee, I.P. Rothwell; *Chem. Rev.* 1988, 88, 1059. (c) Rothwell et. al. *Organomet.* 1999, 18, 3016.
8. (a) S. Hong, A. Kawaoka, T.J. Marks; *J. Am. Chem. Soc.* 2003, 125, 15878. (b) S. Hong, S. Tian, M. Metz, T. Marks; *J. Am. Chem. Soc.* 2003, 125, 14768. (c) D. Fairfax, M. Stein, T. Livinghouse, M. Jensen; *Organomet.* 1997, 16, 1523. (d) P. McGrane, T. Livinghouse; *J. Am. Chem. Soc.* 1993, 115, 11485. (e) P. McGrane, M. Jensen, T. Livinghouse; *J. Am. Chem. Soc.* 1992, 114, 5459. (f) Scott et al. *Organomet.* 2007, 26, 1729.

Listen to this: The Effects of Judicious Listening in the Play, *A Mourning Recap*

COLLEEN FARRELL

Colleen Farrell is a senior majoring in English. Her Adrian Tinsley Program Summer Grant was mentored by Dr. Ann Brunjes. Her main concern upon graduation is to teach English to non-speaking students. Colleen will either earn her MFA at the University of San Francisco upon graduation or will be teaching English through the Reach to Teach program in Taiwan.

It would seem that listening has evolved into being an expression of self-indulgence rather than an expression of compassion and understanding. We listen to music in our cars, at work, on the way to either the car or work. It is background noise at gatherings, theme parks, and in elevators. We have replaced the desire to listen absorbedly with listening to pass the time.

If the meaning of listening has been slightly lost or thrown off course it makes us all the more grateful when we have friends who are there, listening intently, whenever anything goes wrong in our lives. In our darkest moments, the times when life seems absurdly cruel, we become the speakers and our friends are the ones who can turn the volume up. It is during these moments when the power of listening becomes essential to understanding someone's clandestine emotions.

I took this notion and tried to write, stage, and produce a play that states the importance of friendships and listening. The play, *A Mourning Recap* illustrates the idea that without such camaraderie we will become lost and feel abandoned. Once we are lost, no amount of shutting the world out with an i-pod will help.

I have included here four scenes taken from *A Mourning Recap*, which illustrate the importance of listening. The first scene is a monologue spoken by Karista who is the protagonist of the play. She is speaking to a third party not present but who is assumed to be her therapist. By not including the therapist I hoped to enable the audience to listen more to *her* rather than to a dialogue between two individuals.

The inspiration for this monologue came from *The Glass Menagerie* by Tennessee Williams. Tom, the narrator, opens the play with a monologue spoken directly to the audience and addresses the dramatic elements of the play. Williams hides nothing from the audience and holds us in suspense by letting us know that there is some tragedy that will occur before the play ends. Karista similarly acts as a spoiler when the audience sees her in the present tense speaking of actions that have yet to occur. Then, going backwards, we see her in a therapy session before she has recovered from the death of her friends.

KARISTA.

You are watching my memory. This means I am controlling what you see. I hope this means you will take my word for what I present. It's easier to stay straight. Get it out. Like a band-aid. Ever notice that those who say rip it off like a band-aid probably don't have the strength to do the same? At any rate, there are moments. Collapse like a deck of cards you build up, then as you pick up the facts you begin to think, I should have seen this coming. Granted, I couldn't have seen what was coming. I just should have known that it wasn't my mother's fault. Do you love your mother? I *love* my mother. *[Karista moves downstage left she sits in the chair facing the audience]* Have I ever loved someone? Sure. *[Pause]* Besides my parents? That must mean you think I love my parents. No it was a joke. I was kidding. I do love them, more than they know. So, someone else then? *[Pause]* I really liked someone if that answers your question. Once, when I was nine I was in love with Chris McKenna. He played football every recess and I would sit watching along the side. One time the ball was thrown too far and flew past him, it landed right by my feet. I picked it up as he came walking over to me. I reached out to give him back the ball, my hands waiting to make contact with his. Touch them for a second. He took it and pinched me! Then he ran back to play again. It left a bruise and stung for the rest of the day. That means he liked me too, right? *[Pause]* No. That's it. Just Chris. *[Pause]* No one else. *[Pause]* I said that's it. Yes. I miss my friends, but I don't want to talk about that. No, I don't smoke. *[Pause]* Drinking? Not often. *[Pause]* My favorite memory? *[Pause]* Walking off. I did it at theme parks, malls, supermarkets, anywhere really. My sisters and brother would all be stuck together and I'd just wander off. I don't know what would happen but I'd find myself staring off at display, a ride, food and I'd walk in that direction. My mom used to get so scared. One time I was missing for eight hours, it was getting dark and I remember falling asleep on a bench. A security guard found me and took me to the front of the park. My mom was there. She looked different, she had been crying. She swung her arms around me and it was the first time I felt like one of her kids, like she had really missed me while I was gone. I did it too many times to count after that; I'd start walking off just to get noticed. She stopped getting scared, she started using a leash. *(Lights go to black, KARISTA exits)*

I felt that opening the play in this manner would immediately foreground the central theme of listening. We are being forced to listen to the character who most needs to be heard and in turn we are being given information that will be later explained as the play progresses.

The next excerpt parallels Karista's struggle to be heard. Kevin is one of three friends who are seen for the majority of the play. He is a gay man in a relationship with James, someone who cannot be honest about his emotions and his sexuality. In order to portray the scene between Kevin and James I thought that both sides had to be presented. The audience had to know where Kevin was coming from but I thought that this would create a bias and create sympathy resulting in the audiences' taking Erin and Sarah's side (however rightfully so). However, this would make James an easy character to abhor which is not my intention at all. If anything I wanted the audience to sympathize with every character because in doing so the audience would be listening to each character. Therefore, this scene is portrayed in three parts. Kevin is at first speaking directly to Erin and Sarah who are in the moment with him; then he is reminiscing with James present about the conversation; then we are once again brought back to the setting and conversation of the barroom.

KEVIN. Sarah, could I please have another glass of wine.

SARAH. Fine, but tell us what happened.

KEVIN. I went to see him after work and he was waiting for me on the couch. We were supposed to go see a movie. I threw down my bag, jumped right into the conversation. I said, I want to talk about us. He said

During Kevin's dialogue James appears downstage left.

JAMES and KEVIN. What's there to talk about?

SARAH. What did you say?

KEVIN. I said, I needed to know where we stood.

ERIN. Good for you.

JAMES. You're standing there and I'm sitting here on this couch.

Get ready or we'll be late for the movie. Do you want dinner afterward? Greg invited us out later. You're not wearing *that* are you?

SARAH: That's not what you meant.

KEVIN: [*Kevin turns to face James.*] That's not what I meant and you know it.

JAMES: What's wrong? You don't want to go out after? If you didn't bring another shirt wear one of mine.

KEVIN: I feel like I'm hiding.

ERIN: And you are!

JAMES: What are you talking about? If the shirt means that much to you it's fine.

KEVIN: You haven't told anyone about us yet have you?

JAMES: Told what? Let's talk about this in the car. The movie's going to start. Are you staying over tonight?

KEVIN: I want to.

JAMES: Is that a yes?

KEVIN: Yes.

JAMES: Good, let's leave.

KEVIN: Wait, I'm not finished yet.

JAMES: Then spit it out.

KEVIN: Do your friends know about me?

JAMES: I just told you *Greg* asked us out later. What is with you?

KEVIN: Stop it, that's not what I'm talking about. Does Greg know we're fucking.

JAMES: No, I haven't dropped that into the conversation yet.

KEVIN: Do your parents?

JAMES: Even if you were a girl, I wouldn't tell my parents we were fucking.

KEVIN: That's not the point!

JAMES: Then tell me the point so we can leave. [*Pause*] Let's go.

KEVIN: Wait. Why can't you tell people that we're together? When we go out, why can't you tell them?

JAMES: We just started dating. What's the big deal? I don't like my friends to go out with one another. Maybe it gives me friend envy.

KEVIN: It makes you uncomfortable.

JAMES: Kev, Twenty minutes.

KEVIN: I want to know where we stand. I don't want to look at your friends like I'm some friend. I'm falling in love with you.

JAMES: I'm not ready to be a fag. [*Pause*] I'm sorry Kevin. I'm really sorry. I didn't mean it the way it came out. You don't know what it's like for me. My friends aren't like yours. I can't say that everything they think they know about me is a lie. I'm not ready. I'm not. We have to go. *James exits stage left.*

SARAH: Kevin.

ERIN: I can't believe him!

KEVIN: [*Remembering where he is.*] It's fine. I'm fine. He apologized on the way to the movie, at the movie, during the movie, after the movie. I don't even remember the movie. I know he feels terrible. What can you do, you know? It's fine. He's just not ready yet.

ERIN: When will he be?

SARAH: Erin!

ERIN: No. When will he be? Kev, you've known James for six months and have been dating long enough now. You don't need another relationship where you're the only person in it. How much can you take?

KEVIN: You don't get it.

ERIN: Oh really?

KEVIN: Erin. You *don't* get it.

SARAH: Leave him alone. It's over now.

The last excerpt from the play *A Mourning Recap* was the most challenging to write. It takes place between mother and daughter. Once again, I wanted the audience to sympathize with both sides. The scene takes place closer to the present and is a few days after the tragic events described in the play. Karista's mother enters the room and tries to talk with her.

While writing the play I was stuck in very few places and when I was stuck a short walk with Putter, the obese family beagle, would get my mind working. Yet it seemed after a month with no progress that I was at a stalemate with this scene. It wasn't until I took a suggestion from my mentor, Dr. Ann Brunjes, that I found an idea to write.

Dr. Brunjes brought to my attention a playwright she thought I would find particularly interesting: David Mamet. After reading his plays, in particular *Oleanna*, I became mesmerized by his writing style. The way he structures dialogue is exactly the voice I wanted to give to Karista and her mother in the scene I had been struggling with. His dialogue weaves in and out between characters so fast that reading it does not fully explain its novelty. One must hear it and see the reactions of the characters to grasp how fast and realistic it allows the action of the play to be. However, since you are reading this and I have not the means to show you I will do my best to explain. Here is an excerpt taken from David Mamet's, *Oleanna*. The dialogue is between a professor and his student:

JOHN: I have asked you here against, against my

CAROL: I was most surprised you asked me.

JOHN: against my better *judgment*, against

CAROL: I was most surprised

JOHN: against the yes. I'm sure.

Through his use of sentences which, spoken or read individually, are nonsensical, Mamet creates a scene where neither character is listening to the other. The dialogue is individualistically driven because each character is trying to get across his and her own point of view. This is exactly the temperament I wanted both Karista and her mother to possess but at the same time not have the motivation be that of bitterness but of haste. Neither can wait to get out her idea but must say it before each forgets it. While keeping this inspiration in mind I was able to write the scene. Yet, even though I am proud of the written product it can only be done justice if you hear such talented actresses as Katia Hagerman playing the mother and Kathleen Szymczyk as Karista. Both of these women were able to capture the pace and tone of the dialogue far better than I can explain here. Nevertheless here is the excerpt between mother and daughter from, *A Mourning Recap*:

MOM: Why don't you wear your hair up?

Karista shrugs.

MOM: I bought you those bars that you like at the store. Did I tell you that yet? They're in the cleaning cupboard so your father doesn't know where they are. They're all yours.

KARISTA: I'm not leaving.

MOM: I know. Mr. Curran called from the London office and left a message trying to change your mind. I'm...very glad.

KARISTA: What'd he say?

MOM: I'm glad you're staying.

KARISTA: What did he

MOM: ***On the word he*** I want you to stay home.

KARISTA: Don't pity me.

MOM: ***Same time as pity*** I don't.

KARISTA: Where's dad?

MOM: Working on the car.

KARISTA: I'm not going.

MOM: You said that. Would you like a drink?

KARISTA: I'm not going.

MOM: You said that.

KARISTA: *On the word said* I mean I'm not staying.

MOM: You're not?

KARISTA: Ben's taking me out tonight.

MOM: What does that mean?

KARISTA: I can't stay for a drink.

MOM: When is he coming?

KARISTA: Soon. I have to change.

MOM: Can I talk to you?

KARISTA: *Over the phrase 'Can I'* What?

MOM: Sit down. Please, sit down.

KARISTA: Yes?

MOM: I can't know what you're feeling.

KARISTA: I have to get ready.

MOM: I'm trying to talk to you.

KARISTA: *Over the word talk* I have to get ready.

MOM: Sit. Down.

KARISTA: Mom.

MOM: Stay here, with me, and listen. Thank you. I'm so sorry, Karista.

KARISTA: *cutting the word sorry* You weren't driving.

MOM: Can't I help you?

KARISTA: I'm fine.

MOM: There's no way you can be.

KARISTA: What kind of bars?

MOM: Skor.

KARISTA: Thank you.

MOM: I haven't been there. for you. There for you. I'm sorry for that. I never spent much time with my family. But, I have

watched you become this wonderfully sweet, scared, woman and I haven't told you how...proud. How proud I am of this beautiful person you have chosen to be. I love you, Karista. I wish...I should have said so. Many times. I should have said so. Talk to me. When you want. When you're ready.

KARISTA: [*Softly*] Thank you.

MOM: I'm sorry?

KARISTA: Thank you.

Both Karista and her mother experience communication through the mutual lack of it. If someone is consistently stopping your train of thought you are more apt and willing to listen because you have been thrown off of your guard. This is the outcome of the piece and both characters are finally able to listen to the other.

Most people who read plays will admit that the meaning and intention of the piece is not fully grasped unless heard aloud; that necessity is already created for the playwright. The requirement to have the work acted out implores the need to listen. Similar to the style *cinéma-vérité*, David Mamet's terse and choppy speech creates a sense of tangible reality for the audience in a new way for drama. I have brought this into, *A Mourning Recap* in a way which illustrates not only the need to listen but also makes it easier to understand the characters and their motivations. The play relates to a generation who use games when speaking. It is rare when one answers a question with a straight answer or states exactly what he or she is thinking. There are layers in conversation which reveal depth of intent as well as ambiguity in meaning. This guessing game of intent is explored in my play, *A Mourning Recap*. Through the comedic undertone and sharp sentence structure, *A Mourning Recap* is a relatable piece which highlights a universal need to be understood and to be heard.

Works Consulted

Beane, Douglas Carter. *As Bees in Honey Drown*. New York: Dramatists Play Service, Inc., 1998.

.....
Hansberry, Lorraine. *A Raisin in the Sun*. New York: Random House, Inc., 1958.

.....
Mamet, David. *Glengarry Glen Ross*. New York: Dramatists Play Service, Inc., 1982.

.....
Mamet, David. *Oleanna*. New York: Dramatists Play Service, Inc., 1993.

.....
Williams, Tennessee. *The Glass Menagerie*. Dramatists Play Service, Inc., 1975.

Superconducting Phases in Bulk and Thin Film La_2CuO_4

BRANDON GREEN

Brandon is a junior majoring in Physics. He conducted this research under the mentorship of Dr. Hashini Mohotalla with the funding of an Adrian Tinsley program grant.

Abstract

L a_2CuO_4 is considered as the parent material of all high temperature superconductors. The magnetic nature of the material is antiferromagnetic and it is an insulator. During this research we produced a superconductor by doping ceramic La_2CuO_4 with excess oxygen. There are different methods to intercalate excess oxygen into a sample, but in this project we used an electrochemical method. After oxidation, the superconducting properties were measured using a Quantum Design MPMS SQUID magnetometer. The superconducting transition temperature (T_C) was observed near 40 K with a superconducting volume fraction of 16%. Further oxidation increased the superconducting volume fraction to 48.3% with the same observed T_C . According to previous work, super-oxygenated $\text{La}_2\text{CuO}_{4+y}$ material phase separates into an oxygen rich superconducting phase with a T_C near 40 K and an oxygen poor magnetic phase that also orders near 40 K. In order to study the magnetic phase closely, we grew a thin film with thickness near 200nm of La_2CuO_4 on a LaAlO_3 substrate using a Pulse Laser Deposition (PLD) chamber. We checked the epitaxial growth of the film using an X-ray diffraction technique and verified that the thin film was grown correctly. We found that the electrochemical technique is not suitable to dope excess oxygen into the thin film because it ruins the surface. Therefore, as a part of this project we designed an ozone generation system to attach to the PLD. This will help us to grow thin films in an oxygen rich environment and produce superconducting films with better surface qualities.

I. Introduction

High temperature superconductors are considered to be an essential part of condensed matter Physics. The phenomenon of superconductivity is characterized by conduction of electricity without resistance when cooled below its critical temperature (T_C), as well as by the repulsion of magnetic field known as the Meissner effect². Based on this theory, current can flow continuously in a closed loop of superconducting material with 100% efficiency.

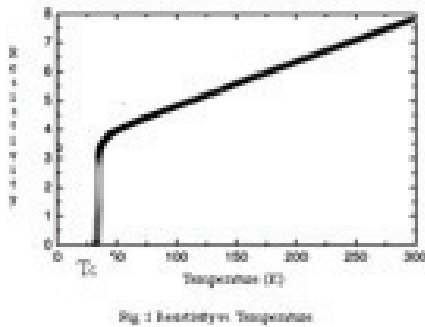


Fig.1 shows that when a material is cooled below T_c , resistance drops to zero. When this happens, the material becomes superconducting. As you can see, these temperatures can be extremely low. The critical temperature in this graph is below 50K.

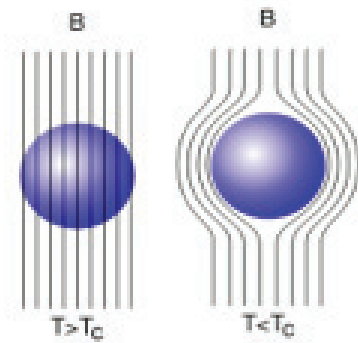


Fig. 2 displays the Meissner effect. On the left, magnetic field lines are going through the material because temperature is less than T_c . On the right we see repulsion of magnetic field lines because the temperature is less than T_c .

There are two types of superconductors, namely Type I and Type II. Type I superconductors are composed of metals and metalloids that show some conductive properties at room temperature. They require incredibly low temperatures to slow down molecular vibrations sufficiently enough to facilitate unimpeded electron flow. Electrons with opposite spin can become paired, forming Cooper pairs, which allow this unrestricted current. Type II superconductors are usually comprised of metallic compounds and alloys. They are mechanically harder than Type I and exhibit substantially higher magnetic fields. The first High T_c superconductor, $\text{La}_{2-x}\text{Ba}_x\text{CuO}_4$, was discovered in 1986 by Bednorz and Muller; they later won Nobel Prize in Physics in 1987⁵. Based on the observed properties in type II superconductors, we can assume that this might play an important role in searching for a solution to the current energy crisis.

II. Why La_2CuO_4 ?

Since the material was readily available to us at the University of Connecticut, and La_2CuO_4 has a simple structure compared to other high T_c superconductors (Fig. 4, 5), it is an ideal system to study. La_2CuO_4 is an antiferromagnetic insulator at room temperature unless oxidized or a divalent cation is introduced into the system (Fig. 3)⁴.

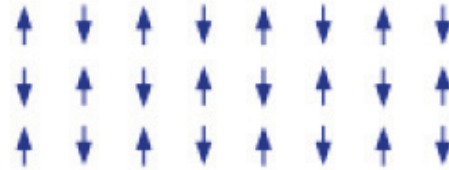


Fig. 3 is a depiction of antiferromagnetism. The spins of electrons align in a pattern which point in opposite directions. In general, antiferromagnetic materials exhibit this pattern at lower temperatures.

When a Lanthanum (La) ions are replaced by a divalent cation (e.g. Strontium – Sr, or Barium -Ba), or when the material is oxidized, the system shows superconducting properties at temperatures below 40K. When excess oxygen is added to the system, instead of it occupying chains in the structure, it goes into interstitial sites.

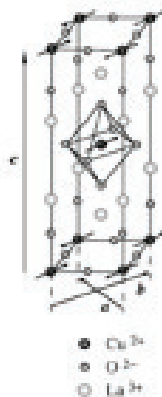
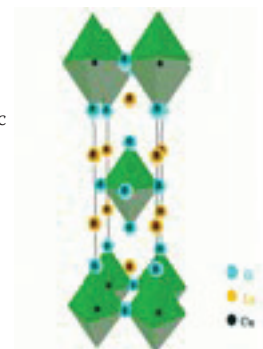


Fig. 4 this is the structure of La_2CuO_4 , it has the simplest structure among all high temperature superconductors. The structure is orthorhombic at room temperature.

Fig. 5 is another diagram of the orthorhombic structure of La_2CuO_4 .



We report on the experiments conducted and their results below. In Section III we discuss the oxidation of our sample and the method used. Section IV explores the experiments done with the SQUID magnetometer and the results obtained. Using the Pulsed Laser Deposition chamber as well as thin film growth is explained in Section V. Characterization of the film with the X-ray Diffractometer is analyzed in section VI, and future work with ozone is discussed in section VII including research, design, and benefits of using an ozone generation system.

III. La_2CuO_4 Bulk Sample Oxidation via Electrochemistry

Oxidation of our sample was essential in our research because it changes the properties of the sample from insulating to a superconducting. After making a 0.4 M solution of NaOH, we made an electrochemical cell as shown in Fig. 6. In order to setup the cell, we cleaned three platinum wires and used them as our three electrodes; working electrode (WE), Counter electrode (CE) and the reference electrode (RE). The sample was wrapped using a Pt mesh and attached to the WE. Since platinum is a good conductor, tightly wrapping the sample with it promotes electrical flow across the RE and WE so the circuit is complete and Oxygen atoms enter the system. We applied .78 V through the cell to start the oxidation process and waited five days.

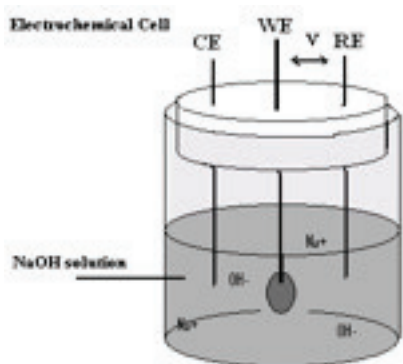
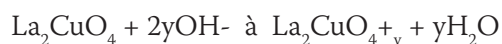


Fig. 6 is a diagram of the electrochemical cell. Electrodes are labeled from left to right as Counter Electrode, Working Electrode, and Reference Electrode.

During oxidation, we checked the voltage frequently to make sure it was near .78 V. It was important to monitor the voltage to make sure it did not go above .90 V as it reverses the desired reaction in the solution.

The oxidation reaction inside the cell is as follows:



As seen in the reaction above, changing the solution is essential because the oxygen gradually gets used up over time as the oxidation reaction occurs.

IV. SQUID Experiments

The Superconducting Quantum Interference Device (SQUID) is a very sensitive magnetometer used to measure extremely small magnetic fields. This probe was used on $\text{La}_2\text{CuO}_{4+\text{y}}$ bulk material to figure out how much of our material was superconducting and to determine the T_c . We also used the SQUID on the as grown sample as well as the oxidized bulk sample to measure the magnetic ordering temperature. The temperature dependence of the magnetization scans are shown in Fig. 7.

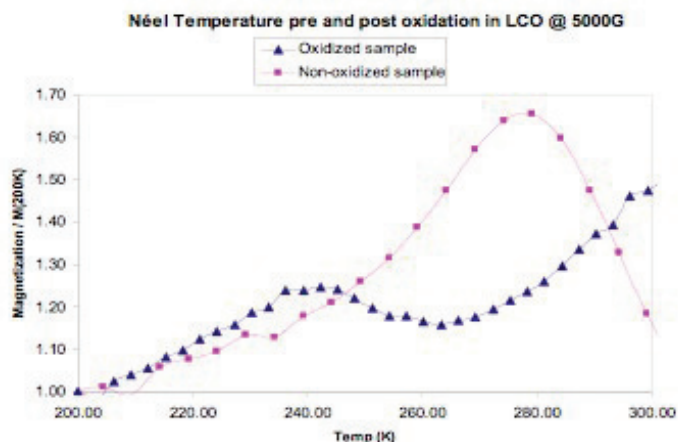


Fig.7 is a normalized graph of Magnetization vs. Temperature. This graph indicated the Néel Temperatures of both as grown and oxidized samples.

The measured temperature was slightly lower than expected (~279K). Since the ordering temperature of the as grown sample should be between 280K and 320K¹, we think this could be due to the fact that the sample was aged and had been sitting at standard atmospheric conditions. If a sample is aged, this means that oxygen can work its way into the system over time. If this happens, the ordering temperature will be slightly lower than expected.

Another SQUID experiment shown in Fig. 8 (scan done at 20 G), measured the diamagnetic response of our oxidized sample. Diamagnetism is the weak repulsion from a magnetic field, and can properly be observed in certain substances in the presence of an external magnetic field using the SQUID magnetometer. When we measure the diamagnetic response of a sample, we can use the data to calculate the superconducting volume fraction (V_{sc}).

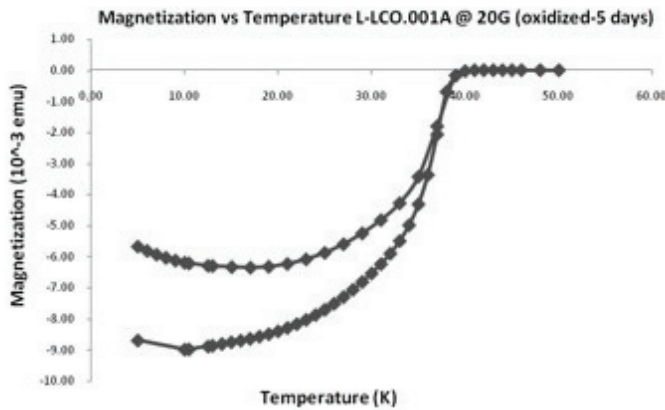


Fig. 8 is a graph of magnetization vs. temperature. This is the diamagnetic response seen for $\text{La}_2\text{CuO}_{4+y}$. These are the values received after oxidizing the sample for five days.

The Meissner effect shows that a superconductor behaves as if $B=0$ inside the sample. We can obtain a useful equation from this assumption to calculate V_{SC} . The equations are as follows (EQ. 1, 2).

$$B = H + 4\pi M = 0$$

$$\frac{M}{H} = -\frac{1}{4\pi}$$

Where M is the magnetization and H is the applied field. Using Eq. 2, we can calculate V_{SC} . Since we can rewrite $M = \mu\mu/V$, $M = \frac{Ba}{V}$ Eq. 2 can be expressed as follows:

$$4\pi \frac{Ba/V}{H} = -1$$

Where $\mu\mu$ is the magnetic moment measured, V is volume, and H is the field applied. Since we know that density is $\rho = \text{mass}/V$, $\rho = \text{mass}/V$ we can make a substitution for V and obtain:

$$\frac{Ba\rho}{mH} = X$$

Eq. 4 is called the volume susceptibility, and we can therefore express an equation to figure out how much of our material is superconducting.

$$V_{\text{SC}} = 4\pi X = -1 \quad 100\% \text{ superconducting}$$

As you can see by Eq. 5, we have expressed the superconducting volume fraction, and can now calculate how much of our sample is superconducting after the five day oxidation process.

$$4\pi \frac{(-6.33 \times 10^{-3})(7)}{(.1749)(20)} = -.159178$$

$$= 16\%$$

We can see from our calculations that our sample is 16% superconducting. We decided to put the sample back into oxidation for a few more weeks. The sample was taken out and followed the same procedure to get the temperature scans of magnetization using the SQUID magnetometer.

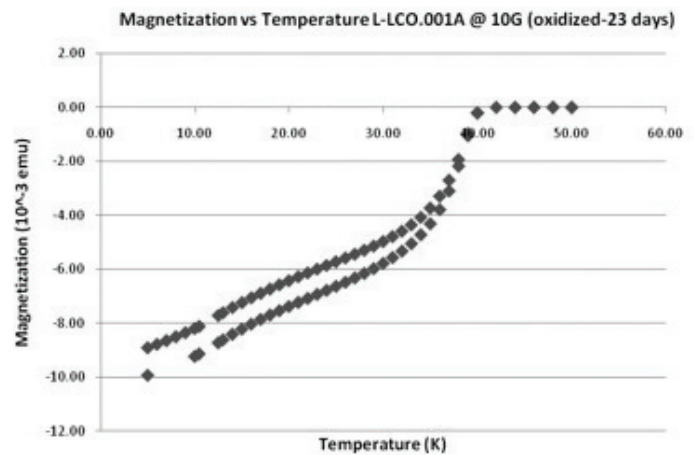


Fig. 9 is another graph of magnetization vs. temperature. This is the second scan done on the sample after the 23 day oxidation process.

As shown in Fig 9, the diamagnetic fraction is larger than before. This scan was done with a 10 G applied magnetic field.. The response is not as clear as the first scan; this is believed to be caused by impurities as well as the non-homogeneous distribution of oxygen in the system. We baked the sample at 100°C to correct this problem. We used Eq. 5 again to calculate the superconducting volume fraction:

$$4\pi \frac{(-6.73 \times 10^{-3})(7)}{(.1749)(10)} = -.483543$$

$$= 48.3\%$$

From this calculation, we see the sample is 48.3% superconducting. Clearly, from the experimental results, V_{SC} increased as a function of time.

V. Pulsed Laser Deposition (PLD)

The PLD, shown in Fig. 10, is used to grow thin films of the materials that we are interested in. The reason why we study thin films is because it allows us to characterize the local structure of a material. With bulk material, there are complications in studying the local structure due to the atomic interactions inside the solid.

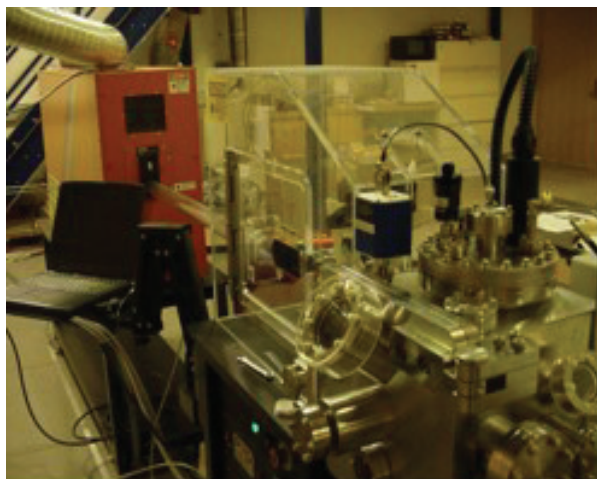


Fig. 10 is a picture of the PLD used at The University of Connecticut. A Class IV laser travels into the optics chamber which gets reflected into the sample chamber. The sample target is mounted inside and is blasted by the laser which produces a plume of plasma that deposits onto the substrate. This is all done over a course of a day.

The Class IV laser pulses a beam which travels into the optics chamber where it is reflected and goes into the metal growth chamber seen on the far right. Inside the chamber we mounted a sample target of La_2CuO_4 (LCO) that was ablated and the result was a plume consisting of the target material. Inside the plume are stoichiometric proportions of lanthanum, copper, and oxygen. The plume then deposited onto a 1 cm^2 piece of LaAlO_3 (LAO) substrate which was mounted directly above the target. The reason for choosing LAO as the substrate was because it is oriented in the (001) direction and has a similar a-b lattice parameters to the La_2CuO_4 material. This is essential to thin film growth, because it will not grow properly if the structures are not aligned correctly. For growth conditions during this experiment, we had a substrate temperature of 800°C , a chamber pressure of 2.9×10^{-6} Torr, laser energy 0.252J (frequency $\sim 4\text{Hz}$), and a growth time of 10 minutes. The thin film is about 200 nm thick, and the LAO substrate is about 2mm thick. Although the growth time seems short, the entire process can take up to a day because of the precision of keeping the chamber under vacuum (pressure goes up while heating). After the film is grown, we took it out of the chamber and prepared it for X-Ray Diffraction experiments to check if the film was grown correctly.

VI. X-Ray Diffraction Experiment

This experiment can be used on both powders as well as thin films. With thin films, this experiment is very helpful because it verifies that the thin film has grown with the proper orientation. The X-Ray Diffractometer was used on the LCO thin film (Fig.11, 12). Since the substrate used was LAO (001), any peaks we see on the results of the X-Ray Diffraction experiment must show the film was epitaxially grown (along the (00l) plane). We verify this using Bragg's Law:

Using lattice parameters a, b, c, and Miller Indices (hkl), a relationship can be expressed as follows:

$$n\lambda = 2d \sin \theta$$

Because the film is epitaxially grown along c axis, only (00l) peaks will appear. (h = k = 0)

We can then rewrite Eq. 2 as follows:

$$d = \frac{1}{\sqrt{\left(\frac{h}{a}\right)^2 + \left(\frac{k}{b}\right)^2 + \left(\frac{l}{c}\right)^2}}$$

With Eq. 3, we can substitute our solution for d into Eq. 1. Assuming n = 1, we obtain:

$$d = \frac{1}{\sqrt{\left(\frac{0}{a}\right)^2 + \left(\frac{0}{b}\right)^2 + \left(\frac{l}{c}\right)^2}} = \frac{1}{\sqrt{\left(\frac{l}{c}\right)^2}} = \frac{c}{l} \quad (3)$$

Based off of this equation, we can generate a set of 2 values specific to our material. We know c, λ is wavelength of the X-Rays emitted by the Diffractometer, and l is any integer. These 2 values can be compared with the results given by the experiment and any epitaxial peaks not shown on the X-Ray Diffraction results is may indicate a poorly grown film. If the results of the experiment however show all peaks generated, then we can conclude that the film is grown properly.

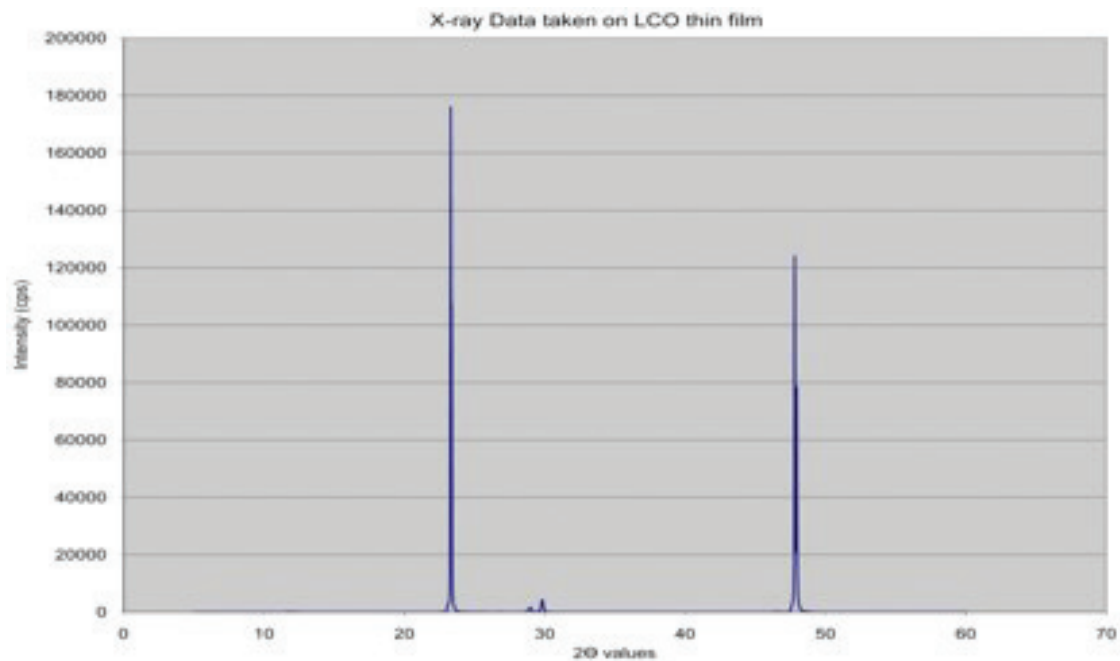


Fig.11 is Intensity vs. 2θ linear scaled graph of the X-Ray Diffraction experiment. Only LAO substrate peaks are visible on this scale.

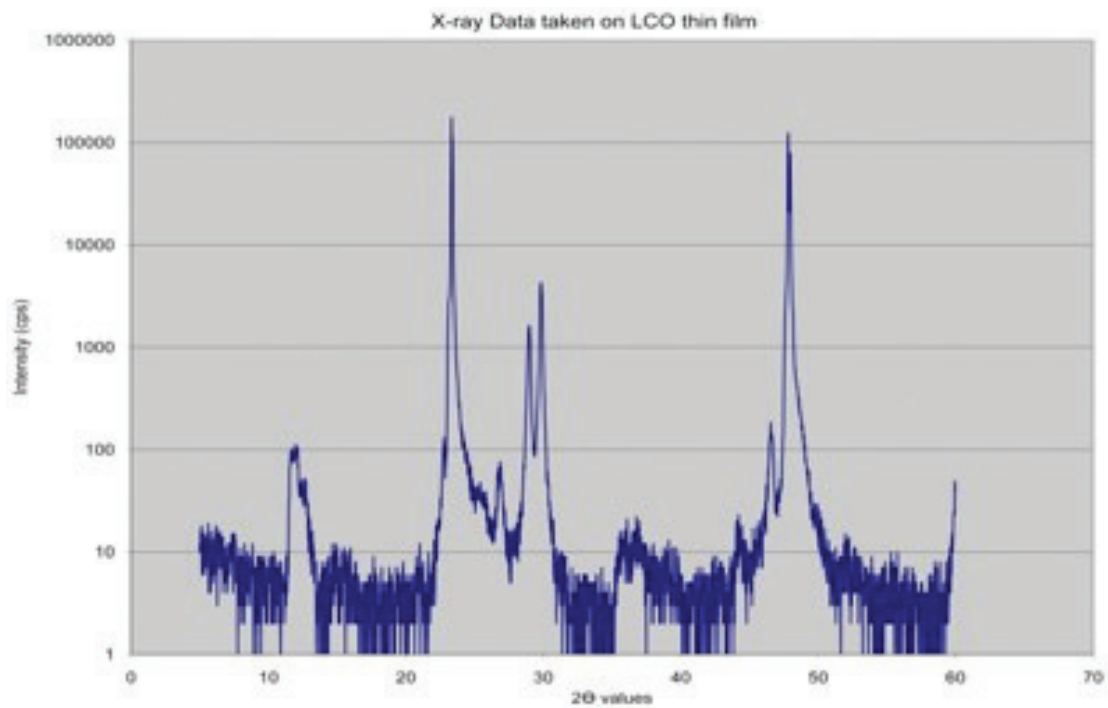


Fig.12 is Intensity vs. 2θ logarithmic scaled graph of the X-Ray Diffraction experiment. Thin films as well as LAO substrate peaks are visible on this scale.

As shown in Fig. 11, from the X-Ray, substrate peaks are substantially larger than the films from the LCO thin film. Since the substrate is much thicker than the thin film, it gives a larger signal than the thin film. If we change the axis to a logarithmic scale (Fig. 12), we can see the LCO thin film peaks along with the LAO substrate peaks.

VII. Ozone Generation

The electrochemical oxidation method is harmful to the thin film surface. As a result, ozone has been researched as an oxidizing agent for our thin films. Ozone is a powerful oxidizer. An ozone generator (Fig. 13) has been designed, built, and awaits testing. It will eventually be used in the PLD system to grow thin films in an ozone rich environment. This method is beneficial because it does not damage the thin film surface, and the samples are expected to be superconducting after growth in the PLD.

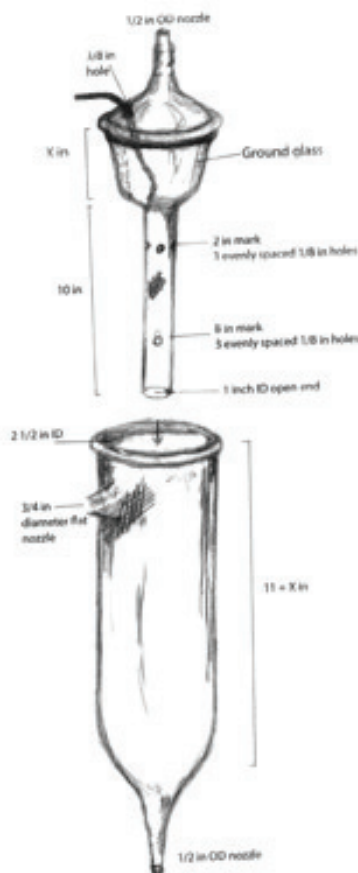


Fig. 13 is a schematic drawing of the Ozone Generator. Design done by Brandon Green.

Our primary focus for ozone generation is based off of the idea of a corona discharge created between two conducting plates. The amount of ozone produced is inversely proportional to the gap between the plates. The other contributing factors to the amount of ozone produced are the amount of voltage applied across the cell, as well as the flow rate of oxygen into it³. The two glass tubes are lined with an aluminum mesh to act as the two conducting plates. Oxygen is flowed through the top and goes into the cell. As it flows in, the bottom of the inner tube is corked, forcing flow out of the holes drilled in the inner tube. This causes the gas to travel through the gap between the two conducting plates which drive the reaction to produce ozone. A voltage of ~10kV and a frequency of 18 – 21 kHz are essential to drive the reaction¹. If successful, this ozone generator will allow The University of Connecticut's Condensed Matter Physics group to add this system to their Pulsed Laser Deposition chamber. The benefit of adding this generator to the PLD is that it will allow thin films to be grown in an ozone rich environment, which will produce films that are already oxidized with a smooth surface. Unfortunately, we have not had the chance to test the generator yet because of the lack of essential supplies that allow the running of this experiment safely.

Conclusion

The electrochemical method of oxidation was successful in producing a superconductor from the ceramic bulk La_2CuO_4 material, T_c was near 40K. The La_2CuO_4 thin film was successfully grown in the PLD. The X-ray Diffractometer gave data showing that the thin film was successfully grown in the (001) direction. This film has been oxidized via electrochemistry and still awaits SQUID results. The ozone generator has been built and it is hoped that it will eventually be added to the Pulsed Laser Deposition chamber to grow thin films in an ozone rich environment. The two oxidation methods will be compared, and it is hoped the ozone generator will produce superconducting films with undamaged surfaces.

Parts of this research project still remain unfinished, but the experiments conducted showed strong success. We hope to continue my work with researching an ozone generation system, and test my design. If we can produce an oxidized thin film out of the chamber, it could mean better experimental results.

Acknowledgements

Special thanks to the Adrian Tinsley Program Coordinators at Bridgewater State College, Dr. Hashini Mohottala, and the research group affiliated with Dr. Wells at the University of Connecticut for the opportunity to perform this project.

References

1. Falkenstein Z., Coogan J.J., Microdischarge Behavior in the Silent Discharge of Nitrogen-Oxygen and Water-Air Mixtures, *Applied Phys.* 817-825 (1997).
2. Kittel, Charles. *Introduction to Solid State Physics*. Hoboken, NJ: John Wiley & Sons, 2005.
3. Kogelschatz U., Dielectric-Barrier Discharges: Their History, Discharge Physics, and Industrial Applications, *Plasma Chem. And Plasma Proc.* Vol. 23, 1 (2003)
4. H. Mohottala, et. al., Phase Separation in Superoxygenated $\text{La}_{2-x}\text{Sr}_x\text{CuO}_{4+y}$, *Nature* 377 (2006).
5. Moodenbaugh A.R., Xu Youwen, et. al., Superconducting Properties of $\text{La}_{2-x}\text{Ba}_x\text{CuO}_4$, *Phys. Rev. B* 38, 7 (1988).

NCUR: National Conference on Undergraduate Research

THE UNDERGRADUATE REVIEW

VOL. IV

Religious Heresy and Radical Republicanism in John Milton's, *Paradise Lost*

LISA RIVA

Lisa wrote this piece under the mentorship of Dr. Greg Chaplin and presented it at The National Conference on Undergraduate Research in California in 2007.

John Milton's *Paradise Lost* remains one of the most influential works of literature from the seventeenth century not only for its literary quality, but also for its controversial relationship to politics and theology. Throughout the epic, Milton subtly references distinctly Republican political concepts, continuing his fight against Royalist political views even after the Restoration. More controversial than his political viewpoints, however, is the heretical portrayal of biblical figures. By rejecting the Trinity and depicting God the Father and the Son of God as two separate beings, Milton adopts a theology many critics term Arianism. Although critics have previously recognized and dealt with Milton's Arianism as a theological issue, they have left its relationship to the author's radical political thought unexplored. *Paradise Lost* incorporates both Republican concepts, as established in his political tracts (such as the *Tenure of Kings and Magistrates*), and heretical Arian theology, as set out in his *De Doctrina Christiana*. Through his use of an Arian theology, Milton is able to depict the Son's necessary rise to glory through merit, a concept that naturally gives way to an argument against the birthright of monarchs. By framing the poem around an Arian portrayal of the relationship between God and the Son, Milton is able to best define his political values in his biblical epic, fusing together two otherwise separate spheres of radical thought.

Before actually beginning *Paradise Lost* in 1658, Milton published several political and religious tracts that, read today, reveal the author's evolving ideas about politics and Christianity. In 1649, Milton published what many consider to be his most sophisticated and radical political argument, *The Tenure of Kings and Magistrates*. This tract serves as a response to the political debates that circulated in England after the Civil War of the 1640s. According to Isabel Rivers, "The political conflict was chiefly over the question of sovereignty, ... The most widely held political theory was that of the balanced constitution, or mixed monarchy, in which sovereignty was shared between king and parliament..." (308). Although many supported the democratic nature of this balanced system, others had more extreme political standings. Many continued to support the idea that the birthright of a king enabled him to rule over his subjects as he saw fit; these people subscribed to the Royalist party. Others, according to Rivers, "began to abandon their appeal to tradition, and switch to revolutionary opinions: that parliament could make law by itself; that government was based on a contract between ruler and ruled, so that the king was answerable to his subjects; and that rights were more important than custom" (308). Milton, in his arguments against tyranny, found himself naturally aligned with these so-called Republicans.

In the *Tenure of Kings and Magistrates*, Milton constructs an argument against tyranny and the so-called birthright of kings by working against popular Royalist opinions. Sir Robert Filmer's *Patriarcha*, one of the many Royalist political tracts of the time, claims that the relationship between a king and his subjects was like that of a father to his sons. According to Filmer, the right to rule is historically passed down from Adam's authority over his sons, and thus, "the succeeding patriarchs had, by right of fatherhood, royal authority over their children" (6). Filmer's argument is, essentially, that a king's subjects are like his sons and that they should respect him and his God-given authority. In Filmer's model, God rules over monarchs and divinely-appointed monarchs rule over men.

In the *Tenure of Kings and Magistrates*, Milton claims that Filmer's belief in the so-called birthright of kings leads to tyrannous rule and unfit monarchs. He writes: "that to say, as is usual, the king hath as good a right to his crown and dignity as any man to his inheritance, is to make the subject no better than the king's slave, his chattel, or his possession that may be bought and sold" (756). Here, Milton deconstructs Filmer's inheritance metaphor, claiming that such a system only makes one's subjects slaves and property. Milton's proposed solution to the tyranny of the birthright system is that all men, including monarchs, should be recognized as men under God. He writes: "No man who knows aught, can be so stupid to deny that all men naturally were born free, being the image and resemblance of God himself" (754). Thus, instead of monarchs serving as intercessors between God and other men, the hierarchy is simplified: God rules over all men on Earth.

Just as his political tracts indicate radical Republican ideals, so do Milton's religious prose works break away from mainstream orthodox belief. Composed in the late 1650's, Milton's *De Doctrina Christiana* is a lengthy theological treatise. In *De Doctrina*, Milton outlines his principle beliefs about the Christian faith and emphasizes his unorthodox understanding of the relationship between God and the Son. He rejects the Trinity and insists that God the Father and the Son of God are two distinctly separate beings, a position that critics such as John P. Rumrich and Michael Bauman term Arianism.

Surfacing in the fourth century, the heretical movement known as Arianism rejects the orthodox Christian notion the God and the Son are two persons of single divine being who share a mystical connection. Instead, Arians argue that God and the Son do not share the same essence, that they are separate beings with different powers and limitations. Milton supports this claim in *De Doctrina*, stating that: "If Father and Son were of one essence, which, because of their relationship, is impossible, it would follow that the Father was the Son's son and the Son the Father's father"

(264). According to Milton's logic, the Son is demoted to a level below the Father. The Son is therefore defined as a creature—much like man—who is not one with God, but instead shares in his glory.

Although classified as Arian, Milton does deviate slightly from the traditional Arian doctrine by claiming that the Father and the Son do share the same substance, that is, they are composed of the same material. Milton's understanding of substance, however, is more universal in that it is substance that connects all creatures to God. According to his stance in *De Doctrina*, God's substance is present in *all* created beings. Once again, this theology allows the Son to be defined as another of God's creatures—endowing him with qualities of a creature rather than the properties of God the Father. What makes the relationship between God and the Son closer than that of God and other creatures is their mutual will (fulfilled through the Son's actions). According to *De Doctrina*, the Father and the Son are one "not in essence but in love, in communion, in agreement, in charity, in spirit, and finally in glory" (220). It is the Son's merit, and therefore not his birthright, that accounts for what Milton refers to as the "extremely close" communion that the Son shares with God (220).

Critic John P. Rumrich identifies a potential reason why seventeenth century Republicans may have been interested in Arianism. He suggests: "Perhaps the impulse toward demystification expressed in Arianism was dimly perceived as a threat to the ideological basis of monarchical power" (87). This perceived connection between radical political and religious thought is at work in Milton's *Paradise Lost*. In order to identify the ways in which Milton's Arianism and Republicanism work together in the poem, we must first recognize the ways in which the poem is, as Michael Bauman calls it, "an Arian document" (206).

During scenes in which God and the Son appear together, Milton consistently describes the two beings as physically separate. After being described as seated on two separate thrones in Book III, God demystifies his relationship with the Son when he announces that he is seeking someone to be offered as a human sacrifice to save mankind. He asks:

Say Heav'nly Powers, where shall we find such love,
Which of ye will be mortal to redeem
Man's mortal crime, and just th' unjust to save,
Dwells in Heaven charity so dear? (213-16)

Milton's God already knows that the Son will serve as the human sacrifice, but he poses the question aloud. In doing so, Milton implies that the Son is unaware of his eventual offering. If he were aware, it would not be the spontaneous heroic act the angels interpret it as. The dialogue that follows between the Son and God reemphasizes this disconnection; although these two beings are close, they only communicate verbally. If Milton were to suggest that God and the Son could communicate in nonverbal ways, readers would understand the two beings as having a more mystical connection. Instead, God is all-knowing, but the Son does not appear to be aware of his role until he responds to the Father. If the poet subscribed to the Trinitarian view, no dialogue about this pivotal event would be necessary because they would be two parts of the same being. Milton's Arianism requires that he separate the Father and the Son in order to portray the Son as a heroic agent separate from God.

Throughout *Paradise Lost*, the Son, God, and others comment on their understanding of the Son's role and his status as a created being. After the Son's offer to be the human sacrifice, the angels sing in celebration. Their hymn reemphasizes Milton's notion of the separation between God and the Son, but also addresses the concept of creation:

Thee next they sang of all Creation first,
 Begotten Son, Divine Similitude,
 In whose conspicuous count'nance, without cloud
 Made visible, th' Almighty Father shines,
 Whom else no creature can behold; on thee
 Impressed th' effulgence of his glory abides,
 Transfused on thee his ample Spirit rests.
 He Heav'n of Heav'ns and all the Powers therein
 By thee created, and by thee threw down
 Th' aspiring Dominations: (III.383-92)

Here, the concept of the Father's glory as being reflected in the Son draws a line between the two beings. The Son is not described as being *in* God or *a part* of him, but instead as a "shining" reflection of his glory. This passage emphasizes that God created the Son as a separate being, but also suggests that God created the Son in order to use him as a vehicle through which God may achieve his will. In offering himself as a sacrifice, the Son fulfills his duty as the mechanism through which God can perform action, and also defines himself as a noble creature by performing meritorious action.

It is clear that Milton attributes authority and praise to the Son because he embraces heroic martyrdom. The Son is valued not because of his natural connection to the Father, but instead because of his meritorious choices and actions. In staying true to

the notions of birthright versus merit described in *The Tenure of Kings and Magistrates*, Milton constructs a hierarchy in *Paradise Lost* that reflects a society in which God is the one and only monarch. All other created beings, including the Son, are placed below God and have the ability to rise closer to or fall further away from God based on their use of free will.

The political undertone of the hierarchy constructed in *Paradise Lost* is emphasized through Milton's use of political terminology. The key words, merit and birthright, come up several times in descriptions of the relationship between God and created beings, suggesting that Milton intended to fuse together his religious and political ideas through his characters. In a particularly telling passage from Book III, God uses this political vocabulary to explain to the Son how and why he shall rise to power:

Because thou hast, though throned in highest bliss
 Equal to God, and equally enjoying
 God-like fruition, quitted all to save
 A world from utter loss, and hast been found
 By merit more than birthright Son of God,
 Found worthiest to be so by being good,
 Far more than great or high; because in thee
 Love hath abounded more than glory abounds,
 Therefore thy humiliation shall exalt
 With thee thy manhood also to this throne;
 Here shalt thou sit incarnate, here shalt reign
 Both God and man, Son both of God and man,
 Anointed universal King; (305-17)

Milton defines the Son as a mechanism through whom God acts. This idea, that God relies upon the Son's willingness to accomplish change, emphasizes the Arian distinction between the Father and the Son by commenting on the Son's subservience to the Father. This particular passage also makes a strong statement about the nature of ascent through merit as opposed to birthright. By stating that the Son will rise "By merit more than birthright," Milton uses the voice of God to make a rather political statement. Just as his Republican beliefs would have dictated that a monarch should gain power solely because of his execution of sound judgment and justice, so do the beliefs of Milton's God. The Son's "rise" to power, therefore, comes only as a consequence of his willingness to perform meritorious works. This passage continues to reinforce the themes of Arianism and Republicanism as God continues:

...all power
 I give thee, reign for ever, and assume
 Thy merits; under thee as Head Supreme
 Thrones, Princedom, Powers, Dominions I reduce:
 All knees to thee shall bow, (III. 317-21)

God once again stresses the fact that all power the Son receives is “given” to him by the Father, and that such gifts are based on the Son’s good actions. God continues, stating that all earthly governments will fall under the Son when he takes his throne, again reinforcing Milton’s concept of hierarchy. In this system, God remains at the top and the Son is below him. Milton again reminds his readers that God is the one true monarch to whom all men answer. He also indicates that the Son is a sort of secondary monarch because he has achieved a status closer to God than other created beings. Because of his merit, the Son has been granted the opportunity to rise. Once again, Milton uses this pivotal scene in Book III to juxtapose the Arian relationship between the Son and the Father with a politically sound system in which created beings rise to power based on their merit, not their innate closeness to the existing monarch.

Milton’s discussion of merit in *Paradise Lost* is not limited to the Son’s ability to rise. In Books XI and XII, the most politically charged sections of the poem, Michael explains to Adam that man has lost his authority over other men as a result of the fall. Michael tells Adam that although he would have held power over his future sons, Adam has lost his “pre-eminence” and will be “brought down / To dwell on even ground now with they sons” (347-48). As Michael and Adam watch from the highest point in Paradise, the future of mankind is played out before them. Milton’s version of history is decidedly Republican; it involves several failed governments under the tyrannies of unfit monarchs and records the degeneration of fraternal societies. Through Michael’s history lesson, Milton once again places the characters of the poem within an Arian hierarchy in which God is the one true monarch. Even the most political situations appear through a filter of Arian belief. In doing so, Milton necessarily employs the use of theology to define a political viewpoint. Milton’s *Paradise Lost* is, then, a poem that does more than just embody both political and theological spheres, it is an epic designed to fuse together the author’s radical Republican principles and heretical Arian theology.

Works Cited

Bauman, Michael. *Milton’s Arianism*. Frankfurt: Peter Lang, 1986.

Filmer, Sir Robert. *Patriarcha and Other Writings*. Ed. Johann P. Sommerville. Cambridge: Cambridge UP, 2006.

Milton, John. *Complete Prose Works of John Milton, Volume 6*. Eds. Alfred, William, et al. New Haven: Yale UP, 1993.

Paradise Lost. Ed. John Leonard. New York: Penguin Books, 2000.

“The Tenure of Kings and Magistrates.” *John Milton: Complete Poems and Major Prose*. Ed. Merritt Y. Hughes. Cambridge, MA: Hackett, 1957. 750-780.

Rivers, Isabel. “Political and Religious Issues in the Time of Milton.” *Paradise Lost: A Norton Critical Edition*. Ed. Scott Elledge. W.W. Norton, 1992. 307-313.

Rumrich, John P. “Milton’s Arianism: Why it Matters.” *Milton and Heresy*. Ed. Stephen B. Dobraski and John P. Rumrich. Cambridge: Cambridge UP, 1998. 75-92.

Progression and Cycles: Historical and Societal Change in James Fenimore Cooper's, *The Pioneer*

JESSICA MARTINHO

Jessica is a senior majoring in English. She wrote this piece under the mentorship of Dr Ann Brunjes and presented it at the National Conference on Undergraduate Research at Dominican University in California(NCUR '07).

As the European Enlightenment swept across the Atlantic Ocean, a great change took place in the nation, a change that turned American eyes from the heavens to the earth and forced men to look not to God, but to themselves for answers. As Robert A. Ferguson summarizes in his article on the American Enlightenment, "The Enlightenment in America is sometimes conveyed in a single phrase, the political right of self-determination realized" (368). As this statement suggests, the Enlightenment symbolized a newfound reliance on the self and man's ability to reason as a means for the progression of both the individual and the nation as a whole.

This self-determination and reliance upon method and reason, however, was often found to be problematic, for a reliance upon man requires that man be infallible, and as many people found, this requirement could not be met.

One of the texts that explores this conundrum is James Fenimore Cooper's *The Pioneers*. In the novel, Cooper presents his readers with a very bleak outlook on America's future and warns that if it continues to follow its current path dominated by a reliance upon reason, American culture will use up all of its resources and dwindle to nothing. Throughout the novel, Cooper demonstrates a great anxiety over land consumption and attempts to warn readers that resources are quickly dwindling. Coupled with the fear of land exploitation is Cooper's lack of faith in man's ability to govern and litigate such an issue. Cooper's trepidation surrounding law and man's ability to successfully create, uphold, and enforce laws is another anti-Enlightenment theme that permeates the text.

Despite these apparent anti-Enlightenment sentiments, a closer reading of both *The Pioneers* and Robert Ferguson's article on the American Enlightenment is required in order to fully appreciate Cooper's complex relationship with the Enlightenment. Ferguson's article suggests that American progress, in all its forms, was a constant tug-of-war between two extremes, never a steady rise. This idea that American progress is not linear hearkens back to *The Pioneers*, for in the novel, Cooper illustrates a constant flux between progress and decline through the many cycles he employs throughout the novel. *The Pioneers*, although it seems to present the reader with a bleak outlook on the achievement of American progress, essentially gives hope to the reader, by showing that dark times will eventually give way to lighter ones, and that one day, through a series of these cycles, America will become a better nation.

First, in order to explore Cooper's complex relationship with Enlightenment thinking, it's important to explore his trepidation surrounding man's ability to reason. One of the most striking themes explored by Cooper in *The Pioneers* that expresses this fear is the theme of land exploitation and conservation. A prime example of this tension between consumption and waste is seen in the character of Judge Temple.

Throughout the novel, Judge Temple constantly tells the settlers that they need to decrease their excessive uses of the land. Temple tries to set the precedent for his followers by not allowing the use of maple wood in his home. This is not very effective, however, because the Judge has little to no control over his people or his household. At the same time, Cooper highlights the hypocrisy in Temple, for although he talks about land conservation, Temple never actually enforces it and actually practices the opposite. This hypocrisy is exemplified in the dinner scene, for right before Temple begins to preach about the excessive felling of trees, the narrator gives a page-long description of the various dishes served at the table, showing that although Temple talks about conservation, he is placed in the very seat of opulence and excess. Judge Temple's character is doubly important because he is not only the vocal warning against land exploitation but demonstrates a susceptibility to this kind of excess through his inability to establish laws prohibiting it and also in his inability to govern his own opulence.

Cooper further bolsters Judge Temple's bleak view of progress by providing an abrasive foil to his character. Richard Jones, though Temple's friend and relative, is always at odds with Temple's views on progress and nature. When Temple admonishes Richard for using maple wood in his house, Richard replies, "Poh! Poh! cousin 'duke, there are trees enough for us all, and some to spare. Why I can hardly tell which way the wind blows, when I'm out in the clearings, they are so thick and so tall" (109). Richard's beliefs, unlike Temple's, are based on immediate observations and tangible results. Richard bases his beliefs on what he can see, taste, and touch, not in what might be in the future. These kinds of observations are representative of Enlightenment thinking in that they focus on man's fallible reason and perception.

While Judge Temple is a passive advocate for land conservation and Richard Jones is an active advocate for land exploitation, Natty Bumppo demonstrates temperance between the two. Throughout the novel, Natty pleads for people to only take what they need from the land. For example, in the scene in which the men are hunting pigeons, Natty says of their excessive killing, "It's much better to kill only such as you want, without wasting our powder and lead, than to be firing into God's creators in this wicked manner [...] for I don't relish to see these wasteful ways that you are all practising" (248). Here Natty voices an opinion of land

consumption that Richard Jones cannot understand and Judge Temple cannot enforce. Natty represents an idealized relationship between man and the land, where there is a balance between need and consumption, speaking against the "wasteful ways" of the arrogant scientists and those who are too weak-willed to prohibit them.

While land conservation is one of the main concerns of Cooper in *The Pioneers*, there is one other theme that is as equally significant and profound, and that is the complexity of creating and enforcing law. Throughout the novel, Cooper exhibits an anxiety surrounding law and man's ability to create a law that satisfies the need of every man. In the novel, Cooper demonstrates how the law is weak and can easily be subverted, how the law can counteract a man's better judgment, and how it unsuccessfully attempts to encapsulate the complexity of society by trying to express it with a limited language.

As Charles Hansford Adams states in his study of Cooper's relationship with law, "If America is to consummate its destiny as the land of apotheosis, where the individual consciousness, free of external restraints, can achieve the sublime integrity of Reason, the 'shabby' expedient of law must disappear" (13). Here Adams illustrates one of Cooper's many grievances with American law: it is incapable of blanketing America with justice because it fails to adhere to the various systems of belief in different people, often enforcing the opposite of what is actually intended.

Judge Temple, the head of law in Templeton, is a perfect example of Cooper's lack of faith in systems of law. While the Judge wants to provide his people with a fair and just place to live, he is unable to enforce the laws that he seems to uphold. As previously mentioned, the Judge believes in a land where land consumption will be restricted, but not once does he successfully enforce this law within the town or even within his own household. This is one of the many arguments Cooper offers to the reader about law: even if the law is well-formed and backed with good intentions its enforcement relies upon a few individuals, in this case Judge Temple, who are fallible in that they may not have the capacity for imposing these laws on other men. The law is easily subverted without strong men to uphold them, and so the law system that Templeton is built upon is a shaky one.

Another problem with the law Cooper presents in the novel is expressed once again by Adams: "[T]he law's linguistic rigidity suggests also its extreme dependence on language. Its vocabulary may be limited, but its insistence on linguistic precision and specific usage reveals the extent to which the culture that threatens Natty is a verbal one" (Adams 62). Here Adams shows that not only is the law in *The Pioneers* imperfect in its enforcement and ideology, but also in the way it is expressed through a limited language.

In the courtroom scene the dangerous and sometimes ineffectual liaison of language further complicates the fragile relationship between the characters in the novel and law. As Adams stated, Natty Bumppo is the biggest victim of the language of law. As Mr. Van der School presents the jury with Natty's second indictment, the narrator says of the indictment, "It accused the prisoner of resisting the execution of a search-warrant by force of arms, and particularized, in the vague language of law, among a variety of other weapons, the use of the rifle" (365). This "vague language of law" is at the heart of Natty's confusion in the courtroom. The law of Templeton is linguistically confounded and fails to incorporate Natty's Native American culture when it was crafted. To Natty and the rest of his kin, the laws of Templeton are confusing and do not apply because although they respect the laws, they feel it is crafted around a culture unlike theirs, setting up fences and restrictions in the middle of their everyday routines.

For the most part, *The Pioneers* presents the reader with a very bleak view of America's future. Despite this dark thread of uncertainty that pervades the text, there is an underlying current of hope for America, and that current of hope lies in Cooper's use of cycles in the novel. Through cycles Cooper is able to express the give and take of progress discussed in Robert Ferguson's essay on the American Enlightenment.

At the very beginning of the novel, the narrator discusses Marmaduke's acquisition of wealth. In this description, the narrator comments that wealth fluxes in a series of cycles, between wealth and poverty. In this cycle, emigrants struggle to make money only to have it squandered by their children; this then gives rise to a new generation that struggles to regain the family fortune. The novel starts with this theme of cycles to present the reader with a thread of hope among the other pessimistic themes. Here Cooper demonstrates that the accumulation of wealth, along with the many other forms of progress, is not linear, but cyclical. This fluctuation between two extremes ties to Ferguson's essay on the American Enlightenment.

Cooper's use of cycles is not only found in his theories on economics, but he also demonstrates a struggle between two extremes in a more natural way through his description and incorporation of the different seasons. The first half of the novel takes place in the winter, which Cooper describes as a very whimsical time, matching his description of the snow with the very light action in the story. When spring arrives, however, there is a shift in the tone of the novel, for Cooper's spring is not one of rebirth and rejuvenation, but rather a dull, gray spring that signifies the commencement of labor. Once again Cooper juxtaposes these two extremes as a means of demonstrating the circuitous path of progress. By using the seasons, one of the most common and well-known cycles, Cooper incorporates his story and his views on progress as part of a natural flux between two extremes.

This focus on cycles is not atypical for American writers because it borrows from a philosophical theory that permeated the Enlightenment and one that many philosophers, including Georg Hegel, Emmanuel Kant, and Karl Marx, often drew upon: the theory of dialectical progression. Dialectical progression maps progress in a non-linear form and sets it upon a series of cycles going from what Hegel called a progression from thesis to antithesis and then to synthesis. Simply put, dialectical progression does with progress exactly what Cooper does in *The Pioneers*; it goes from one idea, like wealth, which gives rise to its exact opposite, poverty, and having learned from both extremes, the next cycle will have a new status of wealth which will then give rise to its exact opposite and perpetuate the cycle.

Given this theory, Cooper's attitude towards progression and the American Enlightenment become more positive. While he seems to fear for America's future, he also offers the reader with hope by demonstrating that progress is not linear. Americans will struggle and fall just as often as they succeed. In this regard, Cooper supports the Enlightenment and believes that although man is imperfect and although an emphasis on reason is sometimes problematic, the dialectical progression of the nation will naturally lead imperfect men to progress.

The Pioneers is at its core a complex novel that attempts to temper the many strong, radical ideas of the American Enlightenment. Cooper demonstrates how an emphasis on man and his reason can be problematic and shows how institutions like law and controlling land conservation are quite difficult given the fallibility of man. Despite these pessimistic views of the American Enlightenment, Cooper's attitude towards it is not so simple, for underneath these pessimistic views is the belief that progress is not a linear notion but a process that occurs through cycles, dialectically progressing as America flexes between two extremes. Presenting the reader with a complex attitude towards the American Enlightenment, *The Pioneers* is both a realistic warning and a beacon of hope for the political, social, intellectual, and physical advancement of America.

Works Cited

Adams, Charles H. *The Guardian of the Law: Authority and Identity in James Fenimore Cooper*. PA: Pennsylvania State University Press, 1990.

Cooper, James F. *The Pioneers*. New York, NY: Penguin Books, 1988.

Ferguson, Robert A. "What is the Enlightenment? Some American Answers." *The Cambridge History of American Literature*. Ed. Sacvan Bercovitch. New York, NY: Cambridge University Press, 1994.

Kelly, William P. *Plotting America's Past: Fenimore Cooper and the Leatherstocking Tales*. Carbondale, IL: Southern Illinois University Press, 1983.

Works Consulted

Axelrad, Allan M. *History and Utopia: A Study of the World View of James Fenimore Cooper*. Norwood, PA: Norwood Editions, 1978.

Blakemore, Steven. "'Without a cross': the cultural significance of the sublime and beautiful in Cooper's *The Last of the Mohicans*." *Nineteenth-Century Literature*. 52.1 (1997): 27-57.

Buchholz, Douglas. "Landownership and Representation of Social Conflict in *The Pioneers*." *James Fenimore Cooper: His Country and His Art*. New York: SUNY, 1989. 94-102.

Marshall, Ian. "Cooper's 'Course of Empire': Mountains and the Rise and Fall of American Civilization in *The Last of the Mohicans*, *The Spy*, and *The Pioneers*." *The Pioneers*. *James Fenimore Cooper: His Country and His Art*. New York: SUNY, 1989. 55-66.

Ringe, Donald A. *James Fenimore Cooper*. NY: Twayne Publishers Inc., 1962.

Taylor, Alan. "The Great Change Begins: Settling the Forest of Central New York" *New York History*. 75.3 (1995): 265-290.

Van Valen, Nelson. "James Fenimore Cooper and the Conservation Schism" *New York History*. 62.3 (1981): 289-306.

Coursework

THE UNDERGRADUATE REVIEW

VOL. IV

The Sovereignty of the Individual: Thoreau's Call for Reformation in *Walden*

BRADFORD VEZINA

Brad is a senior Philosophy and English major who wrote this piece for Professor John Kucich's American Literature course. Brad will be attending law school in the fall.

"I do not propose to write an ode to dejection, but to brag lustily as a chanticleer in the morning, standing on his roost, if only to wake my neighbors up."

Henry David Thoreau – *Walden*

It is a gross error, and one commonly made, to read Henry David Thoreau's *Walden* as a condemnation of society, as an account of a man's resignation from society to the woods along Walden Pond in Concord, Massachusetts. While Thoreau did, indeed, harbor a sharp distaste for the industrialization prevalent during his time, his search for a life of simplicity and truth lead him to the shores of Walden Pond. For Thoreau, reality and truth—and ultimately the reformation of society—are found through an inward evaluation of the self and a contemplation of the necessities of life. In this way, *Walden* is an attempt to reform both the individual and society during a period shackled by conformity and consensus. In essence, Thoreau argues that any reformation of society is primarily predicated on first reforming the self through an inward exploration of the soul, and that each reformation necessitates the other.

In light of this, Thoreau's experimentation at Walden Pond is a deviation from the communal utopias that were gaining popularity during his time. The largely idealistic image of a utopian community, founded on the transcendental virtues of self reliance, simplicity, and freedom, certainly had an appeal during the 1840's. These communities labored under the belief that their example of an ideal community would draw the country away from the path of increasing industrialization and slavery that was prevalent during the time. One of these utopian reformations was Brook Farm, established in 1841 in West Roxbury by its founder George Ripley, a Unitarian minister.

Brook Farm consisted of a small number of people, including, for a short time, Nathaniel Hawthorne, who sought a new style of living outside the confines of society—that is, "to break free from the deterministic roles that his or her inheritance had created" (Francis 138). In a letter written by George Ripley, Ripley describes the intentions of Brook Farm: "Our objects are to insure a more natural union between intellectual and manual labor than now exists; to combine the thinker and the worker, as far as possible, in the same individual; to guarantee the highest mental freedom" (qtd. in Richardson Jr. 101). In essence,

members of Brook Farm labored to shed the trappings of society, from which point they could then tailor society to a state more conducive to the individual.

Yet Thoreau, while sympathetic to Brook Farm's intentions, felt that such communal reformations were hopeless. He grounded this belief on two reasons: first, that a communal reformation was no different than society in its organization and treatment of the individual; second, that a true reformation of society hinges on first reforming the individual, something a communal reformation neglects. While the Brook Farm experiment—and perhaps communal experiments in general—promised to shed the “deterministic” roles of society, Thoreau quickly points out that such involvement in the community would only result in assuming more obligations of the community itself.

Indeed, those people wishing to join the community of Brook Farm under the impression that the experience will afford a time to frolic in the wilderness, a time to languish in a warm den reading a book, would soon find they were severely wrong. Brook Farm aimed to apply a rigorous work ethic of manual labor that for many people was unbearable. Nathaniel Hawthorne, writing to his wife, Sophia Peabody, tells of a physical strain so great at Brook Farm that it gave him an “antipathy to pen and ink” (“Letter to Sophia Peabody 418). By committing yourself to a communal effort for reformation, says Thoreau, you would only be hurling yourself in another societal mold of a smaller scale.

What a communal utopia fails to provide is individual autonomy. Unlike Brook Farm, Thoreau's two year sojourn to the woods along Walden Pond is an attempt to cast off all social ties and focus on the individual, to “pursue his own way” (Walden 57). As Robert D. Richardson, Jr., writes: “Thoreau's stay at Walden was the ultimate reform commune, reduced, for purposes of emphasis, to the simplest possible constituent unit, the self” (Richardson Jr. 150). Thoreau understood, as Hawthorne experienced first-hand, that a communal reformation obligates its members to specific set of chores, not so much to reform the individual, but to sustain the community itself—thus the individual becomes subservient to the community.

However, the reason that a communal utopia truly falls short in the reformation of society, according to Thoreau, is that it fails to acknowledge that, as constituents of an institution, any reformation must first begin with the individual. In the chapter “Economy” of *Walden*, Thoreau hints that it's not the external makeup of society, but the internal temperament and virtues of the people that should be of concern to us. “While civilization has been improving our houses, it has not equally improved the men who are to inhabit them. It has created palaces, but it was not so

easy to create noblemen and kings,” he states (26). “What good is any reformation of society if its constituents are not virtuous?” Thoreau asks us.

On this point, Hawthorne seems to share a kindred spirit with Thoreau in that he, too, acknowledges that a reformation must begin with the soul although, Hawthorne seems ready to cast humanity under the province of evil. In “Earth's Holocaust,” Hawthorne writes: “Unless [reformers] hit upon some method of purifying the foul cavern [the heart or soul], forth from it will re-issue all the shapes of wrong and misery” (Cain 330). A true reformation, according to both writers, is not exterior, but interior. With this in mind, it's clear that Brook Farm's reformation attempt simply starts at the wrong point.

At the heart of *Walden* is the need for people to subject themselves to an inner-exploration of the soul—and with good reason. At the time Thoreau went to Walden Pond, industrialization was slowly inching its way across New England, forcing people to work mechanical jobs and to “lead lives of quite desperation” (5). As Thoreau flatly put it: “But men labor under a mistake. The better part of the man is soon plowed into the soul for compost. It is a fool's life, as they will find when they get to the end of it, if not before” (3). Thoreau saw that people's lives were dictated by their industrial work, not by an inner desire to live and explore life's offerings. Of this drone-like existence Thoreau states:

Little is to be expected of that day, if it can be called a day, to which we are not awakened by our Genius, but by the mechanical nudgings of some servitor, are not awaked by our own newly acquired force and aspirations from within. (71)

Here Thoreau criticizes, if not laments, the hollowness of life that the industrial era has visited upon New England. While the increase of industrialization throughout New England certainly agitated, if not enraged Thoreau, it was the extravagant and wasteful ways of the people—the symptoms of industrialization—that disheartened him. People seemed to accept their robotic existence; they wrapped themselves material goods. Thoreau felt that “most of the luxuries, and many of the so-called comforts of life, are not only dispensable, but positive hindrances to the elevation of mankind” (10). Throughout *Walden*, Thoreau asks readers not to scorn society, but to question the necessities of life; to evaluate society's values; and, more importantly, to excavate the soul through earnest contemplation of life. And it is for this purpose that Thoreau takes to the woods of Concord, axe in hand, and builds his cabin along Walden Pond. “I went to the woods because I wished to live deliberately, to front the facts of life, and see if I could not learn what it had to teach, and not, when I came

to die, discover that I had not lived" (72). Such a statement embodies Thoreau's irritation with the society in which he grudgingly lived, a society enthralled by materialism. Yet, at the same time, this statement (and *Walden* in its entirety) is a statement of hope—hope in that what it means to live can be found through an individual reformation, through a life of contemplation.

Mason Marshall likens Thoreau's experiment at Walden to a Socratic attempt to spiritually elevate the citizens of Concord, Massachusetts. Thoreau plays "a vital role in his service to other people, much as other rhetorical devices were integral to ancient spiritual guidance," he states (417). Indeed, like Socrates and other ancient philosophers, Thoreau urges people to seek the truths and necessities of life in order to enrich their conscience. The idea that truth cannot be found in materialism resonates throughout Thoreau's *Walden*. On truth he writes: "No face which we can give to a matter will stead us so well at last as the truth [...] we are not where we are, but in a false impression," and "Our inventions are wont to be pretty toys, which distract our attention from serious things" (259,41). There's a whisper of Socrates' famous dictum "the unexamined life is not worth living for men" in these statements (Plato 39).

Unlike any communal reformation, Thoreau's *Walden* attempts to reform the individual through an examination of the self and the necessities of life. In the first chapter of *Walden*, "Economy," Thoreau argues that the necessities of life—food, shelter, clothing, and fuel—can be procured self-sufficiently without a "sacrifice of life" (39). This account is very much a statement of autonomy in that Thoreau highlights that many people lead a life of desperation because they choose extravagance over simplicity. He is essentially saying that we have the choice as to whether we want to free ourselves from materialism or search for the spiritual truths that life has to offer.

By finding truth and understanding the necessities of life, says Thoreau, the individual can free his conscience and find personal autonomy, which is essential for a life of well being. Only when a person attains freedom can he actualize his fullest potential. Ruth Lane, in *Review of Politics*, describes Thoreau's conception of autonomy:

[Thoreau] defines freedom, not as overwhelming and ceaseless self-

aggrandizement but as the freedom to grow, to grow to the fullest maturity of which each [person is capable]. Human beings are not animals, merely to follow their genetic dictates, but thinking individuals who thus may pass through and transcend many different types of behavior. (292)

Needless to say, the "mechanical nudgings" of the booming industrialization and rigid institutionalization of New England—and of communal reformations in general, for that matter—posed a threat to such intellectual growth and independence.

On the other hand, Thoreau's refusal to pay a poll tax and his subsequent imprisonment during his stay at Walden highlights that for a self-reformation to succeed the government, too, must be reformed. Thoreau holds this belief much for the same reason that he deemed communal reformations ineffectual in reforming both the individual and society. Like Brook Farm, the government tends to render its constituents subservient to its will. Ironically, the fact that Thoreau was pursuing a self-reformation at Walden when the government arrested him underscores the need for a government that refrains from needlessly interfering in its citizens' lives.

Much of Thoreau's beliefs on government are discussed in his essay "Resistance to Civil Government." Although "Resistance to Civil Government" is not part of *Walden's* text, the reason for Thoreau having written it stems from his imprisonment *while at Walden*. Thoreau opens the essay with his famous dictum, "[t]hat government is best which governs not at all" (Lauter 1738). Such a statement draws a significant amount of criticism in that it appears that Thoreau is sponsoring anarchy. Of these critics is Sam Shaw who writes: "Thoreau saw only his own dissent; he seems not to have thought of the dangers of tyranny by a minority, as a majority" (Edel 406). Yet Thoreau does not call for anarchy, "but at once a better government" (1739). Thoreau seeks a new kind of government.

This, however, raises the question of why, according to Thoreau, a better government is needed and what kind of government should exist. Thoreau's quarrel with the government is largely due to the government's insistence on forcing the individual to conform to its wishes, many of which seem unjust and unwarranted. Rather than the government being the expedient of the people, the people have become the expedients of the government. Of this relationship, Thoreau states:

The mass of men serve the state thus, not as men mainly, but as machines, with their bodies. They are the standing army, and the militia, jailers, constables, *posse comitatus*, &c. In most cases there is no free exercise whatever of the judgment or of the moral sense; but they put themselves on the level of wood and earth and stones, and wooden men can perhaps be manufactured that will serve the purpose well. (1740)

It is clear from this statement that Thoreau firmly believes that the present government strips its citizens of their rationality, their volition, reducing them to mere pawns—a government that defies the worth and dignity of the individual.

We do not have to search long to find examples of Thoreau's government committing its citizens to do unjust acts, thereby stripping them of their individual autonomy. Of the more prevalent issues that permeated throughout the country at the time were slavery and the Mexican-American war. Thoreau felt that no person must pledge their allegiance to an institution whose actions are unjust. His imprisonment demonstrates this. Rather than pay a poll tax, a tax that he believed would pay for the war with Mexico, Thoreau chose prison.

According to Robert A. Gross, by choosing prison over paying an unjust poll tax, Thoreau invokes a principle of "negative obligation." He describes this principle as Thoreau's unwillingness to "directly or indirectly, be complicitous in injustice to others, even if called on the state to do so" (15). Such passive dissension is founded on the idea that by not serving as the government's expedient of injustice, a person's morals or conscious will not be corrupted. Thus, Thoreau's exhortation to us to renounce allegiance to any unjust and degrading government is his attempt to prevent a person from losing their individual autonomy.

At the heart of Thoreau's attack on government is the belief that government should reflect the nature and values of the individual not vice-versa. Robert B. Downs distills Thoreau's main premise as follows: "In essence, Thoreau's basic contention in "Civil Disobedience" was that the state exists for the individuals [...] Man's conscience should always be his supreme guiding spirit" (342). In this way, the individual is free to pursue his own interests and live a life undisturbed. "There will never be a really free and enlightened State," Thoreau says, "until the State comes to recognize the individual as a higher and independent power" (1752). The government, in other words, must acknowledge the primacy of the individual.

It so happens, then, that we have reached Thoreau's reformation paradox. In order to achieve a successful reformation of society, the members within the society must first reform themselves. The people must find truth and reality through a life of contemplation and simplicity, a life exemplified in *Walden*. By so doing, the people can mould the government to a nature conducive to their character. At the same time, however, a precondition for a reformation of the self is that the external context in which a person resides, that is, the government must be reformed so as to prevent it from interfering with a self-reformation.

Thoreau's *Walden*, while conveying an apparent grudge against industrialization, is a cry for a reformation of society and its people, not for a people's resignation from society. Thoreau's stay at Walden Pond was an attempt to show his fellow citizens

that reformation of society is, indeed, possible but only by first reforming yourself, then the government. He calls this reformation an "effort to throw off sleep" (72). Thoreau saw that the materialism and wasteful extravagance of the people, which the increasing industrialization of the time fostered, cast a somniferous blanket upon the people. And this blanket smothered the spiritual truths of life – and, thus, the possibility of reformation. Thoreau's *Walden* is an attempt to awaken his fellow New Englanders.

Works Cited

- Down, Robert B. "Individual Versus State, Henry David Thoreau: 'Civil Disobedience.'" *Nineteenth-Century Literature Criticism*. Vol. 21. (1989) 340-344.
- Edel, Leon. "Henry David Thoreau." *Nineteenth-Century Literary Criticism*. Vol. 7. (1989) 405-406.
- Francis, Richard. *Transcendental Utopias: Individual and Community at Brook Farm, Fruitlands, and Walden*. London: Cornell University Press, 1997.
- Gross, Robert A. "Quite War with the State: Henry David Thoreau and Civil Disobedience." *The Yale Review*. Vol. 93, Issue 4. (2005) 2-16.
- Hawthorne, Nathaniel. "Earth's Holocaust." *The Blithedale Romance: A Bedford Cultural Edition*. Ed. William E. Cain. New York: Bedford Books, 1996.
- Hawthorne, Nathaniel. "Letters to Sophia Peabody" *The Blithedale Romance: A Bedford Cultural Edition*. Ed. William E. Cain. New York: Bedford Books, 1996.
- Lane, Ruth. "Standing 'Aloof' from the State: Thoreau on Self Government." *Review of Politics*. Vol. 67, Issue 2. (2005) 283-310.
- Marshall, Mason. "Freedom through Critique: Thoreau's Service to Others." *Transactions of the Charles S. Peirce Society*. Vol. 41, Issue 2. (2005) 395-427.
- Plato. "Apology." *The Trial and Death of Socrates*. Trans. G. M. A. Grube and John M. Cooper. Cambridge: Hackett, 2000. 20-42.
- Richardson Jr., Robert D. *Henry David Thoreau: A Life of the Mind*. Los Angeles, Berkeley, London: Univ. Cal. Press, 1986.
- Thoreau, Henry David. "Resistance to Civil Government." *The Heath Anthology of American Literature: Nineteenth Century 1800-1865*. Vol. B. Ed. Paul Lauter. New York: Houghton Mifflin Company, 2006.
- Thoreau, Henry David. *Walden*. New York: Signet Classic, 1990.

Rasselas: A Realist's Narrative on the Quest for Ideal Happiness

LAUREN LE

Lauren is an English major contemplating transitioning her area of study toward Biology, for which she also has enthusiasm. She is very reluctant to part with an immensely endearing major that has introduced her to countless classics and other interesting texts while driving her analytical skills and creativity through writing. Likely, she will keep English as a minor. This essay was written for a course entitled Age of Johnson, taught by Dr. Thomas Curley, who conveys his enthusiastic passion for Samuel Johnson's works and the period through his breadth of knowledge and delightful animation.

A prevalent subject in English critic Samuel Johnson's literary compositions, based on keen observations of the human experience, is the theme of the individual's struggle to find lasting happiness amidst the illusions and self-deceptions that distort reality and lead to vain hopes. Illusory perspectives that sustain a perverted reality drive the perpetual, quixotic search for a pure, ideal happiness despite experiences that continually demonstrate the impossibility of such a sound condition in the imperfect human existence. Johnson's *The History of Rasselas, Prince of Abyssinia* depicts the journey of naively romantic hopefuls exploring different choices of life in expectation of finding one that would ensure them immaculate happiness. Through the work, Johnson denounces the evasion of reality (real circumstances) in favor of the imagination (fantasy) that deludes and exposes the folly of consequentially attending to the quixotic pursuit of perfect happiness.

Upon opening the narrative, Johnson draws the attention of an audience for whom his philosophical fable in the guise of an Oriental romance is targeted: "Ye who listen with credulity to the whispers of fancy, and pursue with eagerness the phantoms of hope" (2680). The whole narrative is composed of a series of alternating cursory encounters and comprehensive investigations into various modes of life. Through the introduction of restless and discontented Prince Rasselas, Johnson immediately dismisses the opinion that ideal happiness is necessarily connected with corporeal gratification. In the paradoxical prison of the lavish Happy Valley, Rasselas feels the oppression of some *thing* missing, amidst the overindulgence of sensual pleasures, that deprives him of a sound mind and perfect felicity. To impress the surface irony of oppression within the happy valley, Johnson embellishes the luxurious setting of diverse floral and faunal plentitude, perpetual security from evil, freedom from labor, and constant gaiety—"revelry and merriment was the business of every hour" (2682)—into the hedonist's paradise. The façade of perpetual happiness maintained by the endless festivities to delight the senses dissipates before Rasselas in his agitated lone wanderings and ruminations over his unhappiness. Hedonism as a lifestyle of pleasure that indulges only the senses lacks the capacity for fulfilling complete happiness. Chapter 2 finds Rasselas, during one of his lone outings, conjecturing what may be that void in the happy valley that prevents him from experiencing complete happiness. In a monologue in which he muses over this substantial feeling of vague emptiness, he considers a "latent sense" that cannot be satisfied with corporal gratification alone: "I am pained with want, but am not [...] satisfied with fullness. [...] Man has surely some latent sense for which

[the happy valley] affords no gratification, or he has some desires distinct from sense, which must be satisfied before he can be happy" (Johnson 2683). In observation of his sullen attitude and withdrawal from the revelry of royal society, one of Rasselas' old instructors contends that his discontent has no concrete basis in the happy valley, where there is "neither labor to be endured nor danger to be dreaded, yet [there] is all that labor and danger can procure" (Johnson 2684). Against this reasoning, the prince expresses that having all means of corporal satisfaction at his disposal has infused in him a need to pursue something, to which desire his former instructor admonishes that had he "seen the miseries of the world, [he] would know to value [his] present state" (Johnson 2684). The instructor's response stirs in Rasselas a desire to witness first-hand the miseries of the world because he is now convinced that it is only through his direct observations of the human plight that he can appreciate his supposed blessings.

Out of the conversation between the two emerges the philosophical truth that it is only through hardship that one can truly know happiness; our possessions, whether of materials, rank, or others' affection and esteem, are of higher value when they are earned with difficulty. Pekayah, Princess Nekayah's favored maid and fellow companion on the journey, shares her encounter with this universal truth in her account of the interaction between the Arab chief and the uneducated, illiterate woman he kept in captivity away from worldly society on an island on the Nile River: "when they vied for his regard, he sometimes turned away disgusted. [...] as they had no choice, their fondness, or appearance of fondness, excited in him neither pride nor gratitude; he was not exalted in his own esteem by the smiles of a woman who saw no other man" (Johnson 2729). Even the absolute shield from human evil and corruption is detestable if its extreme protection robs an individual of experiencing and understanding human nature and the multifaceted human condition, thereby impeding mental growth and realistic perception. Also, through Rasselas' communication of his weariness with life in utopia, Johnson imparts that happiness, in whatever form it may take, cannot last in a condition of constancy—even one of constant luxury—because the mind is inclined toward novelty, and always anticipates its pursuit to engage and excite it. Although Rasselas acknowledges that the condition of constancy detracts from mental excitement (an important element of happiness) as it relates to his existence in the happy valley, he fails to apply this knowledge in his pursuit of the one ultimate form of happiness. All states of happiness are liable to fall into a perpetual haze; in vain will Rasselas and his party hope to find that one choice of life that will endow perfect, lasting happiness.

Toward the end of their journey, Nekayah communicates the discernment that "such is the state of life, that none are happy but by the anticipation of change; the change itself is nothing;

when we have made it, the next wish is to change again," to which Rasselas concurs that "variety is so necessary to content" (Johnson 2739). Through their conversation Johnson's rationale for the evasiveness of a lasting mode of happiness is revealed.

A man of reason, Johnson, through his writings, often censured the predominance of the imagination or the fancy over reason and the sense of reality. *Idler* #32 focuses on the distortion of reality and the illusion of happiness achieved by succumbing to the imagination: "Many have no happier moments than those they pass in solitude, abandoned to their own imaginations [...]. All this is a voluntary dream, a temporary recession from the realities of life to airy fictions; and habitual subjection of reason to fancy." Chapter 44 of *Rasselas*, entitled "The Dangerous Prevalence of Imagination," is devoted to the discussion of disorders of the mind—self-deception, delusions, loss of reality—that overcome rationality when human fancy is allowed to consume the mind unchecked. The delusional astronomer who imagines himself the administrator of the weather and controller of the elements succumbs to this deviation from the sound balance of reason and fantasy from too much time spent in study and meditation without the alleviation of mental distortion from regular companionship.

A realistic scheme that lends much to pessimism pervades Johnson's tale of the vain quest for ideal happiness. James Boswell in his renowned biography of Johnson captures this seemingly pessimistic nature in a dialogue between Johnson and him concerning the accessibility of happiness. In this particular exchange, Johnson imparts his conviction that happiness relates to the capacity to hope, and, as hope is an act of placing faith and possessing confidence in the future in anticipation of positive outcomes, happiness is not to be experienced in the present. Boswell picks at this opinion, asking Johnson if, despite this supposed rarity of human happiness, there are valid times when one experiences true happiness in the present, to which he exclaims: "Never, but when he is drunk" (253). His declaration that "misery is the lot of man" can be extracted specifically from *Rambler* #45, *Adventurer* #120, and *Idler* #32, though this attitude finds expression in various other essays from the three series. In *Rasselas*, he voices this melancholic outlook and details many dismal aspects of human existence relating to this perspective through the poet, Imlac, who tells the prince that "human life is everywhere a state in which much is to be endured, and little to be enjoyed" (2696). The inexperienced and hopeful young prince initially rejects such a gloomy assessment of the human existence, supposing that leading a kind, virtuous life can immunize one from treachery and suffering. Imlac presses on with his grim perspective of the reality of the human condition, stemming from his own observations and experience, while issuing a warning against Rasselas' naïve perception of the real world beyond his secluded haven: "The world, which you figure to yourself smooth and quiet as the lake in the valley, you will find a sea foaming with tempests, and boiling with whirlpools: you will be sometimes

overwhelmed by the waves of violence, and sometimes dashed against the rocks of treachery. Amidst wrongs and frauds, competitions and anxieties, you will wish a thousand times for these seats of quiet, and willingly quit hope to be free from fear” (Johnson 2698).

Countering Rasselas’ notion that virtue can safeguard one against the vice and malice of others, Imlac explains that if the malevolent must suffer ignominy and unhappiness, by their wretched and miserable nature, they will not forbear from disturbing the mental peace of others. With such admonitions against his callow perceptions did hopeful Rasselas embark on the journey to discover the choice of life that could afford him the greatest degree of happiness. In Cairo, Rasselas observed ubiquitous gaiety and benevolence, but, after having entered into the social circles of the city’s mirthful denizens, found his mind agitated and himself unable to share their joviality. Seeking Imlac’s counsel on his mental unrest, he is informed of the deceptiveness of appearances by the poet, who explains that within such seemingly jovial, content society, “there was not one who did not dread the moment when solitude should deliver him to the tyranny of reflection” (Johnson 2702). En route its excursion to seek discourse with a hermit renowned in the country of his habitation for his pious virtue, the party encounters pastoral life, the reality of which leaves it disenchanted. Nekayah, who cherishes the innocence and tranquility traditionally associated with simple pastoral life, is incredulous at rustic reality and particularly disgusted by the rural folks’ ignorance, unrefined nature, and callous malevolence. Johnson, who supported cultured society, debunks the myth of pastoral life as a serene lifestyle of idyllic simplicity and harmony with nature, shattering the deceptive allure. Continuing on their travel toward the hermit’s residence, they find shelter from the heat in the abode of a man of prosperity

Surrounded by fertile nature and domestic joy, Rasselas supposes that the choice of a prosperous life could offer the happiness he seeks, only to be disappointed in his presumption by the affluent man, who discloses the true nature of his situation: that his wealth and popular influence endanger his life by making him the enemy of those envious of his prosperity. As the example of the man of wealth illustrates, prosperity, for all its accompanying comforts and luxury, brings with it a level of uneasiness and fear of victimization—envy makes enemies.

Finally, the three travelers reach the mountain-cave dwelling of the man who has been leading a life of solitude. Through conversation, the hermit reveals his discontent with solitary life, divulging the mental turmoil that plagues the individual who lacks regular company to engage his mind with conversation and activities, describing how such a mind unexercised for want of fresh, external conversation can warp into a muddled state:

“[the] mind is disturbed with a thousand perplexities of doubt, and vanities of imagination, which hourly prevail upon [the individual], because [there is] no opportunities of relaxation or diversion” (Johnson 2707). In addition to this knowledge, the hermit imparts his belief that for the individual that “lives well” and observes virtue, satisfaction can be found in any form of life. Discovering the life of solitude unsound, the three continue on their quest for elusive pristine happiness. Nekayah takes opportunities to observe humble life for traces of felicity and her scrutiny of modest living circumstances and the nature of families eventually lead to an extensive discussion with Rasselas on the dynamics of domestic life. The princess observes that within the range of families, domestic discord exists independent of each family’s economic situation. Although these domestic “civil wars” are not necessarily inevitable, Nekayah perceives that they are generally difficult to avoid because the different years of life bring about significant changes to the overall perspective of the individual, and children by their lesser development cannot “credit the assertions of parents, which their own eyes show them to be false” (Johnson 2712).

Besides the friction between parents and children, family conflicts also arise out of spousal tension caused by iniquities committed by either partner. Repelled by talk of such infelicity that seemed inherent in family life, Rasselas considers the single life, but is deterred by Nekayah’s subsequent description of the bachelorhood: “To live without feeling or exciting sympathy, to be fortunate without adding to the felicity of others, or afflicted without tasting the balm of pity, is a state more gloomy than solitude. [...] Marriage has many pains, but celibacy has no pleasures” (Johnson 2712).

Having, as yet, no luck in tracing the mythical pristine bliss—though, for their originally callow minds, they have gained a great depth of invaluable knowledge to understand life (Johnson indirectly helping his audience to understand the nature of happiness)—they consult an old man still of reason, hoping to hear that perfect happiness, though it eludes youthful pursuit, approaches the individual later in life. The old man offers no solace in his account of his present condition, relating that, for him, “the world has lost its novelty,” (Johnson 2735) that he has lost interest in the physical properties of a world he is soon to quit upon Nature’s beckoning.

Johnson’s poverty and constant struggle for livelihood during most of his life contributes to the aura of pessimism that hovers about the characters’ pursuit of pure happiness, an ideal state that Johnson must have felt was not accessible in earthly existence. Despite the fame attained by his monumental achievement of *A Dictionary of the English Language*, money continued to be a pressing concern.

Rasselas was crafted by Johnson in the span of, astoundingly, one week in January 1759 under the necessity of money to attend to his dying mother—to provide comfort for her on her deathbed, finance funeral expenses, and pay off her minor debts. Johnson did not receive the money for the first edition of *Rasselas* in time to attend to her deathbed and funeral. The reader can perceive Johnson's desolate outlook on human existence in the speech of the old man of reason when he expresses that praises are meaningless to him who has "neither mother to be delighted with the reputation of her son, nor wife to partake the honors of her husband" (2735). Before leaving the company of the group, the man of age and reason indirectly advises the youths to live effectively and attentively to their fullest potential while time and the vigor of youth are still on their side: "My retrospect of life recalls to my view many opportunities of good neglected, much time squandered upon trifles, and more lost in idleness and vacancy. I leave many great designs unattempted, and many great attempts unfinished" (Johnson 2735). He leaves them with what is Johnson's own message to the audience on his impression of ideal happiness: "[I] expect, with serene humility, that hour which nature cannot long delay; and hope to possess, in a better state, that happiness which here I could not find, and that virtue which here I have not attained" (Johnson 2735). The dissatisfaction that the weary, yet hopeful, travelers in search of immaculate happiness continually load onto their minds with each deterring experience in society and each discouraging interview with individuals of different stations in life—which develops the pessimism that characterizes the story—is somehow allayed by Johnson's subtle message of turning to "hope as form of anticipatory happiness" (Joeckel 31).

As Johnson's Christian religion was a significant influence on his life, the hope that he tries to inspire in his audience is a message advising individuals to put faith in the future, and even beyond (i.e. the afterlife), toward indefinite times that still holds the promise of idealized happiness (Joeckel 31). In one of his moral essays, Johnson urges his readers as "candidates of learning" to "[fix] their eyes upon the permanent luster of moral and religious truth, [in which] they would find a more certain direction to happiness" (*Rambler* 180).

Critic Samuel T. Joeckel, in his essay on the Enlightenment's influence on Johnson, believes that there is another reason for his characters' inability to secure general happiness: the particularity of the individual's experience is rejected in preference for the universal human experience. Enlightenment thought denied the notion of happiness in the particulars of unique individual experiences and subjected individuals' experiences to be judged through the universal perspective, by which the unique instances of happiness is devalued. Imlac, who embodies many of Johnson's values, is the medium by which he champions the generalizing

inclination of Enlightenment thinking; he describes the laudable nature of poetry thus: "The business of a poet is to examine, not the individual, but the species; to remark general properties and large appearances [...], neglect the minuter discriminations. [...] He must [...] rise to general and transcendental truths [...]" (Johnson 2694). The problem with this principle of universal uniformity when applied to the judgment of happiness is that it shamefully renders insignificant the valid instances of an individual's particular happiness, which, as Joeckel contends, is "often the locus of true experiences of happiness" (22).

Although *Rasselas* seems to narrate a series of trials with disappointing outcomes, Johnson as a moralist provides a foundation for understanding the nature of happiness while providing valuable lessons and advice for his audience. That Johnson is of the opinion that knowledge, education, and the ability to think and reflect under reason are key to any form of happiness is implicit in recurrent situations in the narrative. *Rasselas*' innate ability to think alienates him from the society of the young men of gaiety of Cairo, whom he repels for their shallow joy: "Their mirth was without images, their laughter without motive; their pleasures were gross and sensual, in which the mind had no part [...] Perpetual levity must end in ignorance; and intemperance, though it may fire the spirits for an hour, will make life short and miserable" (Johnson 2703). Nekayah, in her observation of humble life, also encounters excessive mindlessness and frivolity among the daughters of the families, indulging in their artificial happiness at times and absorbed in petty bickers at others. Pekuah likewise dealt with the frustrating emptiness of the mind in her exasperating company with the uneducated and mindless women at the Arab chief's abode. Johnson also encourages the balance of study with experience, and through Imlac's dialogue with *Rasselas*, this value is emphasized when the poet avows, "I am less unhappy than the rest, because I have a mind replete with images [...] The rest, whose minds have no impression but of the present moment, are either corroded by malignant passions, or sit stupid in the gloom of perpetual vacancy" (2697).

For all his support of Christian morality, Johnson is not blind to the truth that virtue does not guarantee happiness, only "quietness of conscience" (2714). Relating back to Enlightenment ideals prevalent during the 18th century of reason over fancy, transcendental truth, and universal generalizations of the human happiness, Johnson's fable demonstrates through its inconclusive ending of the vanity of an earthly pursuit of happiness and imparts the moralist's own belief in hope as the only true medium by which the possibility of ideal happiness in the future exists.

Works Cited

Boswell, James. *The Life of Samuel Johnson*. New York: The Modern Library, 1965.

Johnson, Samuel. "The History of Rasselas, Prince of Abyssinia." *The Norton Anthology of English Literature*. Ed. Stephen Greenblatt. New York: Norton, 2006.

Joeckel, Samuel T. "Narratives of Hope, Fictions of Happiness: Samuel Johnson and Enlightenment Experience." *Christianity and Literature*. Volume 53. (2003).

The Qin and Han Dynasties: The Flexibility and Adaptability of Military Force and Expansion

CHRISTOPHER HALLENBROOK

Christopher is pursuing a double major in History and Political Science. He developed this paper for History of Imperial China with Dr. Wing-kai To in Fall 2007. Christopher plans to attend graduate school upon completing his Interdisciplinary Honors Thesis.

The course of human history has shown that there is no guaranteed method of conquest and expansion. Large scale armies can crush opponents, but they can also be outmaneuvered or rendered ineffective by terrain; yet more maneuverable forces can be beaten by superior force when constricted by terrain. Changes in tactics can make what was an advantage one day a liability the next. There are even situations in which the circumstances make a conventional military offensive an inefficient or ineffective way for an empire to spread its control and influence. Furthermore, growing empires are confronted with a wide variety of circumstances - geographical, tactical and strategic - from region to region and people to people. As a result, an essential feature for empires seeking significant expansion has been the ability to recognize and adapt, specifically the ability to recognize the specific requirements of the situation and adapt their course of action accordingly. In the history of imperial China, the Qin and Han dynasties both demonstrated this ability to utilize methods of warfare and expansion as dictated by circumstances in order to bring about success. The Qin built their military to exploit the weaknesses of the feudal armies of the Chinese states opposing them, while the Han utilized combinations of large-scale armies, maneuverability, colonization, military adventurers operating independently of the imperial court and small expeditions to expand their domain.

Before the ascension of the Qin and Han Dynasties, China was a land divided. The nearly two centuries prior to Qin unification are known to historians as the Warring States Period, and with good reason. The Zhou king, whose theoretical domain was much of China, was but a figurehead, powerless to intervene as leaders of numerous regional states intrigued and battled to extend the portions of China under their control. These leaders were frequently the feudal lords who were in principle vassals of the Zhou king. At the height of their power, the Zhou had used a feudal system to rule China. Noblemen of the landed aristocracy took oaths of loyalty to the Zhou king, and in return were responsible for ruling over their particular domain. All administrative and military positions were appointed by and responsible to the lord. Each region had such a system under its particular lord, encompassing officials high and low within the civil administration and military, from ministers and commanders down through the ranks to the serfs, who, bound to the land, formed the bottom

of the feudal hierarchy.¹ The result was the creation of political and military hierarchies that were highly decentralized. As the power of the Zhou waned, these feudal domains became de facto states unto themselves, with the lords becoming the leaders who struggled for supremacy. Such struggles continued until the rise of the Qin, whose conquest restored unity to China. In working to consolidate their power, the Qin established the centralized bureaucracy necessary to the direct rule of a large empire by an imperial court, and its successor dynasty, the Han, extended and solidified the work begun by the Qin. These two dynasties thus began the administrative system that would characterize imperial China for many dynasties to come, making the methods they used to expand to the position from which they were able to influence the development of bureaucratic rule throughout China an essential element of Chinese imperial history.

Prior to Qin expansion, the method of Chinese warfare matched the feudal nature of Chinese politics. Feudal lords raised their armies through levies of the peasants under their control. Such armies were limited by the nature of their composition. Farmers could only be called away from their fields at certain times of year. Not only did this limit the duration of feudal campaigns, but it also limited their range, as with less time to march out and return, an army cannot go as far afield. This range factor was further compounded by the fact that those peasants who composed feudal armies simply did not like campaigning a significant distance from their homes and fields.² Thus, feudal society yielded feudal armies that were hampered by their very feudal nature.

The political results of warfare between these feudal armies were as constricted as the forces themselves. As long as they became vassals of the victor, defeated lords retained control over their lands. They had to pay tribute to their new feudal master, but as they retained powers such as tax collection, their power base endured even in defeat.³ As a result, allegiances and tributaries were ever shifting, “altering the grouping but not the structure of power.”⁴ So while this system did bring defeated regions under the control of the victorious power, the conquered states retained such autonomy that the political situation remained ever fluid.

It was amidst this backdrop that the Qin moved to conquer the rest of China. To do so, the Qin developed a military that

would be able to exploit the inherent weaknesses of the feudal armies that opposed them. The most fundamental adaptation the Qin made was to create a professional army. Having no crops to tend or harvest, professional soldiers could be deployed year round, making their use a huge advantage over feudal powers. Furthermore, with these professional troops, the Qin emphasized sheer numbers and maneuverability.⁵ In order to overwhelm the feudal armies, which were constantly gaining or losing detachments based on any number of local factors that could draw men away from the army for a portion or the duration of the campaign, the Qin developed their army “as the most massive striking force of the age.”⁶ But this army was built on more than just sheer numbers; in order to exploit the limited range of feudal armies, the Qin army deployed a strong cavalry force that had incorporated the most useful aspects of the non-Chinese peoples who lived on their borders.⁷ Size and speed therefore gave the Qin army two major tactical advantages over the other Chinese states, and in utilizing them it was, in part, “this cavalry, trained in Frontier warfare, whose rapid maneuver and striking power won an empire for Ch’in [Qin].”⁸

But it was not just in tactics that the Qin differed from feudal China; they also pursued a different set of goals. The Qin fought for total victory and absolute conquest; not merely content to add the defeated lord and his territory to the realm as an additional feudal appendage, administered by the defeated lord’s administrators, as was the prevailing practice, the Qin sought to bring the vanquished region under the direct control of the Qin emperor and his bureaucracy. The result was the first uniform implementation of a new set of strategies, vastly different from those of the feudal states. In order to obliterate the independent structure of a newly subjugated state, the victorious Qin wiped out the entirety of the vanquished royal house. Yet this was just the tip of the iceberg. Whenever the Qin won a battle as part of its conquest of China, the entirety of the defeated army was annihilated by decapitation. But this was never capricious slaughter; it was policy. In the face of such complete destruction, the feudal power structure of the defeated state could not remain intact, not with both lord and those who fought for him dead.⁹ Thus, the brutality of Qin conquest existed for an explicit purpose, facilitating the consolidation of victory into conquest and conquest into empire.

While the Qin Dynasty was short-lived, the more lasting Han Dynasty would prove itself equally adept at adapting their military techniques to fit the particular circumstances of the campaign.

1. Patricia Buckley Ebre, *The Cambridge Illustrated History of China* (Cambridge, UK: Cambridge University Press, 1996) 33.

2. Owen Lattimore, *Inner Asian Frontiers of China* (New York: Capitol Publishing Co., Inc., and the American Geographical Society, 1951) 438.

3. Lattimore, 400.

4. Lattimore, 401.

5. Lattimore, 438-439.

6. Lattimore, 437.

7. Lattimore, 421.

8. Lattimore, 422.

9. Lattimore, 401.

In the second century BCE, the long-reigning Emperor Wudi engaged in a series of campaigns against the Xiongnu, the nomadic people of the Asia steppe along China's northern frontier. He sent out huge armies to fight the tribesmen, with one army reaching 300,000 men and several others of over 100,000 troops.¹⁰ But numbers alone could not carry the day on the steppe, forcing China to adapt to the requirements of the terrain.

The grassland of the Asian steppe lends itself to cavalry warfare. Living in this region made the nomads expert horsemen, as mobility was vital to surviving on the sparse steppe. Additionally, the requirements of hunting on the steppe made its inhabitants highly skilled with the bow and arrow. That they learned, in part as a requirement of hunting on the steppe, to combine these two skills and shoot their bows while mounted made the Xiongnu all the more deadly a foe.¹¹ Xiongnu warfare was thus perfectly suited to the terrain in which they lived.

Thus, in order to defeat the Xiongnu in their own territory, the Chinese had to fight like the Xiongnu. The Han therefore incorporated Xiongnu tactics into their armies, relying heavily on cavalry forces to counter the mounted nomads.¹² As crucially, campaigning deep in the Asian steppe took the Chinese armies far from their frontier bases. This resulted in long supply lines that became ever longer as the Chinese drove back the Xiongnu.¹³ Given the mobility of the Xiongnu as a result of their horsemanship, this left the Chinese in a precarious position, susceptible to being cutoff from supplies and encircled. Neutralizing this vulnerability involved learning to live off of the steppe as the Xiongnu did.¹⁴ By thus achieving independence from their bases, the Chinese armies were able to extend their range even further and, unburdened by supply trains, become more mobile. Thus, that the Han were able to defeat the Xiongnu and move deep into the Asian steppe was a result of the fact that when Emperor Wudi deployed massive armies against the Xiongnu, he did so "with troops that matched the nomads in mobility and striking power."¹⁵ But in the south, the Han could not effectively deploy massive armies of any kind. First of all, the terrain prevented it. Southward expansion brought the Han into a region of swamps, mountains and thick jungles entirely unsuited to the deployment, maneuver and use of armies numbering in the hundreds of thousands. Furthermore, the peoples native to this region did not typically fight in organized armies. They would resist incursion every step of the way, but the

set-piece battle was not to be had.¹⁶ Thus, the primary role of the imperial army was to maintain garrisons to protect Han gains after they were made.¹⁷

In light of this reduced role for Chinese armies, southern expansion took on two main forms, the first of which was colonization. Chinese settlers were sent south along the rivers to establish themselves in the new territory. These settlers brought with them Chinese goods, creating a trade relationship that marked the first stage of tying the people of the region to China. The settlers of course also brought with them their culture, exposure to which instigated the process of assimilation through which China would incorporate these southern regions. Once a region was possessed of a sufficiently high number of settlers, the imperial government was able to send south administrators to oversee the region and promote the process of assimilating the natives to its fullest.¹⁸ In this way the Han were able to add territory to their empire with minimal conflict.

The second method for establishing control over the south was through adventurers. The most famous of these men to be active in the south was Chao Tuo, whose career spanned from the final years of the Qin to the reign of the Han emperor Wudi. After marrying into a clan of the Yue in what is now Guangdong province in south China, he was able to systematically build a powerbase for the creation of his own domain. As Chao continued to expand his territory as a self-proclaimed king, the first Han emperor enlisted him as a vassal. While Chao did not allow himself to be constricted by this relationship, continuing to campaign on his own accord and conquering part of present day Vietnam, after his death Emperor Wudi was able to assert control over those who succeed Chao to rule his domains.¹⁹ Chao Tuo thus serves as an example of how, in terrain in which large Chinese armies could not operate efficiently, the military adventurer could use local forces to build a kingdom that could later be incorporated into the greater Chinese empire.

Meanwhile, in the west, expansion into Central Asia posed another set of problems for the Han Dynasty. Central Asia is a barren and often desert region, interspersed with a number of settled oases. As such, this landscape provided little opportunity for colonization. Additionally, as it lay far from the center of the Han Empire, distance and desert thus served to isolate the region and any Chinese presence there from the rest of the empire.²⁰ Furthermore, as at each oasis there was an established society that could provision a Chinese force, "war among the oases of Central

10. Ebrey, 69.

11. Ebrey, 68.

12. HarperCollins Atlas of World History, Geoffrey Barraclough, ed. (Ann Arbor, MI: Borders Press, 1998) 81.

13. Lattimore, 484.

14. Lattimore, 499.

15. Lattimore, 484.

16. Lattimore, 439.

17. Ebrey, 82.

18. Ebrey, 82-83.

19. Ebrey, 83.

20. Lattimore, 503.

Asia required only that the field force not be too cumbersome to make long marches yet strong enough to overawe each oasis it entered.”²¹ The former requirement effectively ruled out the use of massive armies on the scale of Wudi’s steppe campaigns. Combined, all of these factors severely curtailed the options available to the Han for expansion into Central Asia.

The result of these constraints was that individual commanders of small detachments were able to operate in Central Asia with almost complete autonomy. Among such leaders was Ban Chao, brother of the famous female scholar Ban Zhao. Ban Chao was sent to Central Asia in the first century CE with thirty-six men to promote and protect Chinese interests in the region. During his nearly three decades in Central Asia, despite rarely receiving any reinforcements or direction from the Han Empire, Ban Chao successfully spread Chinese influence at the expense of the Xiongnu.²² Ban Chao accomplished this through what the Chinese came to call “containing barbarians with barbarians.”²³ He made alliances with certain oasis powers and, exploiting long standing animosities among the peoples of the region, used them to fight against other groups that were potential threats to Chinese interests.²⁴ He was thereby able to shape the politics of Central Asia and draw the area into the Chinese orbit, placing China on the Xiongnu’s western flank instead of having the Xiongnu on China’s, all with a modicum of Chinese military presence.

Thus, the first two dynasties to rule over a unified China following the Warring States Period demonstrated skill in adapting to the particular attributes of a situation. The Qin did so by developing an army that would be able to exploit the inherent vulnerabilities of the feudal armies deployed by its rivals. In subsequent centuries, the Han made a number of adaptations as they expanded their empire on multiple fronts. In the north, they utilized large armies that learned how to maneuver, live and fight on the steppe as their enemy, the Xiongnu, did. To the south, where such methods would have been largely futile, the Han utilized policies of colonization and adventurers to bind the region to the empire. And in the west, it was the autonomous commander who advanced the cause of the Han by playing the various peoples of Central Asia off of each other in order to bring the region under the influence of China. In seeking to extend their realms, the Qin and Han Dynasties proved to be flexible in how they utilized military force to facilitate expansion and empire.

21. Lattimore, 491-492.

22. John E. Wills, Jr., *Mountain of Fame: Portraits in Chinese History* (Princeton, NJ: Princeton University Press, 1994) 93-94.

23. Bernard Martin and Shu Chien-Tung, *Makers of China: Confucius to Mao* (Oxford: Basil Blackwell, 1972) 39.

24. Wills, 94.

Works Consulted

Barraclough, Geoffrey. *Harper Collins Atlas of World History*. Ann Arbor, MI: Borders Press, 1998.

.....
Ebrey, Patricia Buckley. *The Cambridge Illustrated History of China*. Cambridge, UK: Cambridge University Press, 1996.

.....
Lattimore, Owen. *Inner Asian Frontiers of China*. New York: Capitol Publishing Co., Inc. and the American Geographical Society, 1951.

.....
Martin, Bernard and Shu Chien-Tung. *Makers of China: From Confucius to Mao*. Oxford, UK: Basil Blackwell,

.....
Wills Jr., John E. *Mountain of Fame: Portraits in Chinese History*. Princeton, NJ: Princeton University Press, 1994.

Lost Leviathans: The Technology of Zheng He's Voyages

MARK DWINNELLS

Mark is a senior double majoring in Military History and Operations Management. This research article was completed for the class Ancient China, taught by Dr. Wing-Kai To. Mark plans to finish the two majors in the next calendar year and begin work on his Master's Degree in Military History.

It has been said that the control of the oceans is the control of the trading world. This has been true from ancient times, with the far-reaching Phoenicians, Egyptians and Qin Chinese trading with primitive sailing vessels, to the mixed oar-and-sail driven water-borne merchants of 0 CE – 1000 CE, through the dawn of the age of square and triangular sails of the latter half of the second millennium CE; now in modern times ocean-going vessels with steam or gas-turbine powered vessels haul more tonnage than entire fleets of past eras, and their military counterparts bear enough firepower to level small countries or irradiate whole continents. Various ships and fleets in many eras have gained acclaim for their crews' skill, builders' capabilities and commanders' prowess; the Athenians in the Battle of Salamis, Sir Francis Drake and the *Golden Hind*, Admiral Nimitz and the Battle of Midway, for example. Sadly, one of the most overlooked of these is Zheng He, a fleet commander in the Ming Dynasty from 1405-1433, who nearly had the ocean-going world under his bow. His fleet's seven voyages relied upon vessels which had levels of technology and skill of both builder and crew not seen in the west until the age of colonialism was fully underway. It is thus appropriate to contrast such vessels to contemporary and later western designs of one or two centuries afterwards in terms of hull composition, design, and capacity.

Little can be said about taking evidences and examples in a bubble; thus, one needs to look at Zheng He's background before his voyages first to understand the reasons for leading the expeditions, determining his ports of call, and why they were of importance. The most trusted servant of the Ming emperor Yongle (also known as Zhu Di), Zheng He was a Muslim by upbringing from and this hints at possible reasons for either his or the emperor's intentions to bring China westward by sea. It was possible their knowledge of trade routes west of China that flowed through the Middle East but did not directly connect to China would be of significant value to the empire, and thus could be incorporated into the tributary system.

The use of naval ventures was opposed by the Confucian officials of Zhu Di's court, as they viewed these attempts to "enroll far-flung states into the tributary system..." as being "not cost-efficient"¹. The justification for the inefficiency of the tributary system was that it worked best with "far-flung or remote states"², which would appear to satisfy the very reason of the tributary system. The other explanation is the hostility of Confucian officials to the power of court eunuchs; in paraphrasing author Louise Levathes, Edward Dreyer notes,

"Confucian officials opposed the voyages from the beginning of Zhu Di's reign, so the entire project was run by eunuchs and was essentially the whim of a strong-minded emperor."³

In this light, the bureaucratic distaste of overseas ventures is apparent, and only the direct orders of the Yongle emperor created the far-flung cruises. The eventual termination after the deaths of Zheng He and the transition to another emperor were set before the Zheng He's fleet even set sail. What was done during those times was something that would surpass all contemporary naval powers.

There are several facets to a successful ocean-going ship's design, with the most important being the function. Form, crew complement, armament – these all serve the function of the vessel. The key vessels of the voyages, Zheng He's 'Treasure Junks' or *Bao Chuan*⁴, had the purpose of displaying the might and awe of China to encourage other nations to enter the tribute system⁵. This somewhat ambiguous function means that the ships had to be able to transport Chinese goods, troops, and livestock⁶. This gave rise to a need for relatively large vessels, with figures ranging from 400 ft⁷ to 440 ft⁸ in length by 160 to 180 ft beam⁹; this necessitated drydock construction facilities of up to 210 ft wide per dock¹⁰, and the length of any of the seven drydocks was 1,500 ft¹¹. These facilities at Longjiang required 20-30,000 men to construct the Treasure Fleet of the Yongle emperor¹².

1. Patricia Ebrey, *Cambridge Illustrated History of China* (Cambridge: Cambridge University Press, 2006), 209

2. Ibid, 209

3. Dreyer, 198

4. Louise Levathes, *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne, 1405-1433* (New York: Oxford University Press, 1994): 80

5. Wu

6. Evan Haddingham, *Ancient Chinese Explorers* (2003; accessed 2 December 2007); available from <http://www.pbs.org/wgbh/nova/sultan/explorers.html>, 1

7. Wu

8. Ebrey, 209

9. Dreyer, 199

10. Ibid

11. Levathes, 77

12. Ibid, 76

One can imagine the technical difficulties in building a vessel of such a size; the dimensions are analogous to four modern American-made Oliver Hazard Perry-class Frigates laid port-to-starboard¹³. The design can be compared to three contemporary vessel classes of European origin of the same and following century: the galley (the *Grace Dieu*), the carrack (the *Santa Maria*), the caravel (the *Niña* and *Pinta*), and finally the galleon (the *Golden Hind*).

The general construction of the Treasure Junks began with the laying of the hull and bulkhead placement at regular intervals.¹⁴ These were made out of elm, camphor, sophora and cedar; the rudder was also made of elm¹⁵. The keel of the ships was bound by iron hoops¹⁶, presumably to reinforce the structure of the wooden spine. The displacement of the ships has varied greatly depending upon the scholars researching the issue, running from a mere 800 tons to 3,100 tons, 14,000 tons and 20,000 tons¹⁷.

The masts, the most important part of the propulsion of the ships, were made out of fir and laid down in front of the bulkheads¹⁸. Each Treasure Junk had 9 masts, with a non-centerline layout of alternating port-and-starboard emplacements of the mast beams¹⁹. When it comes to ship rigging, square sails are vastly more efficient in terms of required manpower and speed with the wind to triangular sails, but triangular sails can be used for tighter maneuvering, and used to cut across the prevailing winds without coming to a dead halt²⁰. It can only be theorized that a full ship-rigged vessel like the Treasure Junk, with minimal if any triangular, or 'lateen' sails, would be able to use the prevailing wind to full effect with the multiple masts catching the air currents. The off-center mast layout would allow the sails to pivot in a far larger area than western designs, thus the square-rigged sails could theoretically have been used when cutting across the wind to the same effect as a lateen sail. The sails themselves were made of red silk²¹.

The less visible assets of the ships were just as necessary and vital to their success on the seas as the general layout and build. Waterproofing was done by using a tung oil mixture, which

13. "FPG-7 OLIVER HAZARD PERRY-class" *Military Analysis Network*, Federation of American Scientists (2000; accessed 2 December 2007); available from <http://www.fas.org/man/dod-101/sys/ship/ffg-7.htm>

14. Levathes, 77

15. Ibid

16. Ibid, 81

17. Dreyer, 199

18. Ibid, 76

19. Haddingham

20. Fredrik Sandström "The Square Rigging" *Sailing Ships* (accessed 2 December 2007); available from <http://sailing-ships.oktett.net/square-rigging.html>

21. Levathes, 82

had to “be mixed and cooked before it would harden into the excellent waterproofing material that had been in use on Chinese ships since the 7th century.”²² The bulkheads were sealed to the deck above them and the hull below, forming watertight bulwarks which greatly enhance the structural stability of the Treasure Junks²³. This watertight, compartmentalized design did not become widespread in the west until long after the sail had been abandoned as the primary method of propulsion, with the advent of the civilian liner *Titanic* in 1911 – over 600 years after the first voyage had begun. Quite possibly most significant in terms of navigation and long-term survival, Chinese expertise in electro-magnetism yielded a compass during the Song dynasty around the turn of the century²⁴, which was put to use in guiding the fleet from Nanjing to its later ports of call.

The ships had an opulent style of decoration, as Levathes describes:

“... the treasure ships were appointed for luxury. There were grand cabins for imperial envoys, and the windowed halls and antechambers were festooned with balconies and railings. The ship’s holds were filled with expensive silks and porcelains for trade with foreign countries.”²⁵

The Treasure Junks were no slouch in armament, either. They were equipped with 24 cast-bronze cannons, each with a range of 800-900 ft.²⁶ While the ships were not primarily built for warfare – they had escort vessels, of the 165 ft. 5-masted *fuchuan*²⁷ design for that purpose- they still were capable of defending themselves if need arose.

So, how do these massive vessels lost to the annals of time compare to the most prominent vessels of their century, and the next? Each of the three European designs had its advantages relative to its era, and yet in many ways they were obsolescent thanks to the Chinese advances in the early 1400’s.

The caravel, a lateen-rigged boat of far smaller proportions than the Bao Chuan, was used heavily by the Portuguese of the 15th and 16th centuries. George R Schwartz, a naval archeologist from Texas A&M, has assembled a history of the class of the ship, describing them as having, “a gently sloping bow and single stern castle...[with] a mainmast and a mizzen mast that were generally lateen-rigged.”²⁸ It should be noted that, when prepared for travel

on the open oceans, the lateen sails would be exchanged for square ship rigs, allowing it to keep pace with the carracks used for trade and conquest. The ships were capable of traversing shallower waters than their contemporary carracks or later galleons due to a shallow draft and smaller size, being only 60-100 ft. in length and about 23 ft. wide and displacing only about 50 tons.²⁹ This light displacement and narrow beam meant it could be used to explore up rivers and other shallow bodies of water. The *Niña* and *Pinta*, of Columbus’s voyage, were of this class.

The next largest vessel of European comparison, the carrack, was the premier maritime ship of the medieval ages. Considered the first intentionally-designed ocean-going vessel by the European sphere of influence,³⁰ the three to four masted vessels were square-rigged on the foremast and mainmast, with the mizzen mast being lateen-rigged for maneuverability in crosswinds. The carrack sported a forecastle and aftcastle, not too different from the designs the Chinese junks of varying sizes had employed. This did, however, make the narrower carracks topheavy. The carrack had a variable design and displacement depending upon the builder, intention, etc. Some examples are given for Genoese carracks during the 15th century with a displacement of 1,500 tons and Portuguese carracks displacing 2,000 tons³¹. Little is mentioned about their armament except that the galleon forces their obsolescence in war by virtue of being its evolutionary descendant. After this point, it could be presumed that their armament followed a lighter pattern, if at all, to that of their larger galleon descendants. Columbus’s *Santa Maria* was of this type, with a length of 85 ft.³²

The galleon, the primary sailing vessel of the seafaring European nations in the 16th- to mid 18th century, replaced the carrack as the preferred liner for trade and war. Of the changes between the two designs, the widespread adoption of cannons in the form of the demi-culverin 9-pounder³³ and the flattening of the forecastle for stability and structural reasons made the construction of any new carracks solely for the purposes of trade.³⁴ The design was

29. *Wikipedia*, 2007, “Caravel” Accessed 2 December 2007 Available from: <http://en.wikipedia.org/wiki/Caravel>

30. *Wikipedia*, 2007, “Carrack” Accessed 2 December 2007 Available from: <http://en.wikipedia.org/wiki/Carrack>

31. Fernand Braudel, *Civilization and Capitalism* [book online] (Los Angeles: University of California, 1992, accessed 2 December 2007); available from <http://books.google.com/books?id=rPgVp3vMOjC&pg=PA423&lpg=PA423&dq=carrack+displacement&source=web&ots=0MNwF2TVin&sig=KTIOJxUc6AIW9V-LiUHFvLIxvmoA>

32. Wu

33. *Wikipedia*, 2007, “Carrack” Accessed 2 December 2007 Available from: <http://en.wikipedia.org/wiki/Galleon>

34. Ibid

22. Ibid, 77

23. Ibid, 81

24. Hadingham

25. Levathes, 82

26. Ibid

27. Ibid

28. George R Schwartz, “History of the Caravel” (MA thesis, Texas A&M, 2006; accessed 2 December 2007); available from <http://nautarch.tamu.edu/shiplab/01George/caravela/htmls/Caravel%20History.htm>

purpose-built for war, with the notable exception of the Manila galleons.³⁵ These vessels were built out of oak (keel), pine (masts) and the hull and decks had various hardwoods.³⁶ The *Golden Hind*, Sir Francis Drake's vessel, was a galleon.

These primarily Venetian, Spanish and English-designed ocean-going vessels were ones that made a lasting of historical importance. But the overall designs of European ships were not limited to just these three nations' shipwrights: to ignore the Baltic powers, such as the Prussians, Swedes and Finns, would unjustly excommunicate the other major seafaring powers in the medieval era.

The cog, a flat-bottomed boat of Baltic origin, is believed to be a design dating as far back as 1299 CE.³⁷ The earliest examples were found upon the Rhine River³⁸, and spread throughout the region as the flat bottom allowed river travel, while the presence of the mainsail from 1100 CE onward³⁹ allowed it to catch the winds on the open ocean with some reliability. The later designs in the 14th and 15th centuries added forecastle-like platforms to the ships,⁴⁰ and at both the bow and stern but without the notable size of the carrack's forecastle or the galleon's sterncastle. The improved superstructure emplacements afforded protection for the sailors, but never truly caught on as the preferred design as the flat bottom prevented the cog from deep-ocean travelling, in the same way that smaller Chinese junks were flat bottomed and thus enable to undertake the heavier seas despite having a highly mobile spindle for the mast to rotate on.

A development of the cog design, the holk, was a purely-Baltic improvement on the cog appearing at about 1400 CE in significant numbers.⁴¹ The multiple sail arrangement, which at about the same time the Chinese had managed to significantly advance to the 7 masts of the *Bao Chuan*, consisted of only 2 square sails, later modified by the 16th century with a third triangular sail⁴² in the Venetian⁴³ or English style. Thus, even the harsh lessons of the Baltic and North Sea did not impart enough experience to European designers to build vessels on par with the Chinese ships, except in the plethora of sail types for particular purposes. The comparisons that can be drawn between the European

designs and the Chinese naval ventures leans in favor of the Chinese in terms of technical mastery, economies of scale, armament relative to the threats, and overall size of the vessels. The Chinese had made a unique sail arrangement to partly mimic the lateen sail while using ship-rigged sails; the European designs either had to go with a mix of sails or only lateen to sail with, with the disadvantage of not being able to make full use of the prevailing winds while leveraging it against the maneuverability they would have against the wind. The Chinese had a notably larger displacement, meaning that their ships were carrying more than the European vessels at the time and afterwards, per ship type. But this has to be balanced by the knowledge that the Europeans continued to build vessels after their initial exploration and trade routes were formed; the Chinese lost out on this due to their political hostility to oceanic ventures and the distaste by Confucian officials' of a eunuch. The Chinese vessels outgunned their immediate contemporaries, but because of the loss of the fleet after Zheng He's death, this fact may well be irrelevant, as the various European ships would be armed as well as, if not better than, the Chinese within a century of the Treasure Fleet's dismantling.

The technical feats of off-center mast emplacement, watertight multiple bulkheads, the first use of a compass, and a reinforced hull with internal bulwarks displayed Ming naval engineering at its finest. Their vessels outsized and carried vastly more cargo tonnage than the largest of their European contemporaries. And yet, tragically, this would be the high-water mark for the Chinese in naval affairs for centuries. Only in the late 20th and early 21st centuries has China begun to grasp the technological strength it once had and stretch itself beyond its shallow rivers and coastal waters to the great blue beyond.

35. Ibid

36. Ibid

37. Jerry Litwin, "Shipbuilding Techniques from the Medieval Age Onwards"
Accessed 13 December 2007, page 151. Available from http://www.cmm.pl/1stCHFpdf/pdf_articles/6.1_Litwin.pdf

38. Litwin, 150

39. Ibid, 149

40. Ibid, 151

41. Ibid, 151

42. Ibid, 151

43. Ibid, 152

Works Cited

- Braudel, Fernand. *Civilization and Capitalism* [book online]. Los Angeles, CA: University of California, 1992, accessed 2 December 2007; available from <http://books.google.com/books?id=rPgVp3vMOjcC&pg=PA423&tpg=PA423&dq=carrack+displacement&source=web&tots=OMNwF2TVin&sig=KTIOJxUc6AIW9VLiUHFvLlxvmoA>
- Dreyer, Edward. "Review of: Levathes, Louise, *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne, 1405-1433*" *Association for Asian Studies* Vol. 54 no. 1 (1995), accessed 2 December 2007; available from <http://www.jstor.org.libserv-prd.bridgew.edu/view/00219118/di973765/97p0972h/0?currentResult=00219118%2bdi973765%2b97p0972h%2b0%2c06&searchUrl=http%3A%2F%2Fwww.jstor.org%2Fsearch%2FBasicResults%3Fhp%3D25%26si%3D1%26gw%3Djtx%26jtxsi%3D1%26jcpsi%3D1%26artsi%3D1%26Query%3D%2522zheng%2Bhe%2522%26wc%3Don>
- Ebrey, Patricia A. *China*. New York: Cambridge University Press, 2006
- "FFG-7 OLIVER HAZARD PERRY-class" *Military Analysis Network. Federation of American Scientists*, 2000; accessed 2 December 2007; available from <http://www.fas.org/man/dod-101/sys/ship/ffg-7.htm>
- Hadingham, Evan. *Ancient Chinese Explorers 2003*; accessed 2 December 2007; available from <http://www.pbs.org/wgbh/nova/sultan/explorers.html>
- Levathes, Louise. *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne, 1405-1433*. New York: Oxford University Press, 1994
- Litwin, Jerry. "Shipbuilding Techniques from the Medieval Age Onwards" accessed 13 December 2007; available from http://www.cmm.pl/1stCHFpdf/pdf_articles/6.1_Litwin.pdf
- Sandström, Fredrik. "The Square Rigging." *Sailing Ships*. accessed 2 December 2007; available from <http://sailing-ships.oktett.net/square-rigging.html>
- Schwartz, George R. "History of the Caravel" MA thesis, *Texas A&M*, 2006; accessed 2 December 2007; available from <http://nautarch.tamu.edu/shiplab/01George/caravela/htmls/Caravel%20History.htm>
- Wu, Jin. *Zheng He's Voyages of Discovery*. Los Angeles, CA: UCLA, 2004; accessed 2 December 2007; available from <http://www.international.ucla.edu/article.asp?parentid=10387>

A Reason to Read: Fiction-Affirming Fiction in Alice Munro's *Open Secrets*

NICHOLAS FRANGIPANE

Nick is a senior at Bridgewater State College. He originally wrote a much shorter version of this paper for Recent British Fiction, but it spiraled out of control and appears in its current form due, largely, to the encouragement and assistance of Dr. Michael Boyd. Nick hopes to continue on to graduate school and pursue a career in academia.

Several years ago I took a class in Ethnic American literature. Near the end of the semester the professor had been pacing the front of the classroom and told us he had been thinking about death; it probably didn't help that we had been recently discussing existentialism in the work of Richard Wright. At the last minute he changed the question on the final, he asked, simply, *does literature matter?* I thought very carefully and I decided the answer was *no*.

I reasoned that if there was no literature little would change. People would still eat, they would still go to work, they would still go to sleep at night and they would certainly still get drunk and make babies and the species would go on. They would watch television instead, perhaps. I reasoned that if everyone who studied English was simultaneously wiped off of the earth no one outside our field would notice (barring, hopefully, our friends and loved ones). Working at Barnes and Noble for years I noticed that rarely does someone who is not studying English buy something particularly literary. We sold mostly magazines and children's books.

English studies began to seem like an elaborate game. I thought, why guess at the meaning of, say, *Gravity's Rainbow* when Pynchon is still alive? Couldn't he, perhaps under duress if necessary, just tell us? I realize that in these days of post structuralism and its variants the author is no longer an oracle who can supply us with answers to the meaning of even his own work, but it felt like we were playing an elaborate game, like an extremely complex crossword puzzle. English studies have radically changed since they were first introduced, when they were principally a way to instill morals; now if literature even attempts such a thing it risks not being considered serious literature at all.

At the end of the exam I had to say no, perhaps it doesn't matter. I, of course, continued to read, and in the back of my head continued to worry about the day when all of the students and professors of English would simultaneously vanish, until I came across books like Yann Martel's *Life of Pi*, William Maxwell's *So Long, See You Tomorrow*, and Alice Munro's *Open Secrets*. These books all feature fiction within fiction, events or stories made up by the characters. In *Life of Pi*, Pi tells the story of his odyssey at sea when he is trapped on a lifeboat with several wild animals, including a Bengal tiger—it amounts to an amazing and inspiring story of survival. However, at the end of the novel we learn it was all an allegory:

there was no Bengal tiger but an incredibly violent and cruel man, and the other animals were representative of other humans on the boat who were violently killed. The end of the novel reveals that the interviewers from the maritime department and the ministry of travel, to whom Pi tells both versions of the story, ultimately prefer the fictional version of events as a way of getting at the true meaning of Pi's story. *So Long, See You Tomorrow*, though not as violent, makes a similar case for the importance of fiction: a man is able to reconstruct events from his childhood by speculating about them, by looking up facts and dates and filling in the empty spots with his imagination—and this, he finds, comforts him. These books, as well as Alice Munro's *Open Secrets*, use fiction within fiction to show the importance of fiction. They are a sort of *fiction-affirming fiction*—stories that show us why stories are important to real people in real life. These novels argue that yes, literature does matter. Similar to *Life of Pi* and *So Long, See You Tomorrow*, in *Open Secrets* Munro's characters often create fiction which allows Munro, like Martel and Maxwell, to argue the importance of fiction.

As Robert Lecker argues, Munro's work is, "preoccupied with the ways in which reading and writing are historically conditioned acts that influence how people define themselves in relation to their community and their present." Munro's characters tell stories, they speculate, and one even writes a film. The stories take place in a character's imagination as often as they take place in the real world. Often, it is up to the reader to decide what *really* happened. Munro works to blur the line between fact and fiction, an act which suggests that the difference is unimportant and that for these characters to truly understand their lives and make sense of the world the facts alone are not enough; they must explore every un-lived possibility, if only in their imaginations, to live fully, to live comfortably, to understand their world and themselves. This use of fiction within fiction unifies the collection and lets Munro explore the idea of an *open secret*. Ultimately, this technique of using fiction within fiction allows Munro, in *Open Secrets* and in her other work, to make an argument for the importance of fiction, and its role in society. In *The Reflexive Novel* Michael Boyd states, "If artists wish to speak of the process of artistic creation or of the relationship between art and life, they may express their ideas discursively...Or they may express their ideas directly in their creative work" (15). Indeed Munro chooses the latter, expressing the relationship between art and life—in her case the role of fiction in society—directly in her creative work, creating fiction which shows the validity of fiction—*fiction-affirming fiction*. In *Open Secrets* Munro's characters' lives are enhanced by the various types of fiction they add to them, reminding the reader that fiction is necessary.

Munro's fiction within fiction is similar to—but not the same as—metafiction. Used loosely, the term may apply but, the

strictest sense of metafiction as, "Fiction in which the author self-consciously alludes to the artificiality or literariness of a work by parodying or departing from novelistic conventions" (OED) does not apply to Munro's work. Munro does not parody or depart from novelistic conventions, traits which are characteristic of works like John Fowl's *The French Lieutenant's Woman*. Rather, Munro's work is simply fiction which contains characters who, in many different ways, produce fiction themselves. Her characters, unlike common characters in metafictional works, rarely write. Munro's characters create their fictions with their stories, their lies, and their imaginations.

In *Open Secrets* Munro uses fiction within fiction and fact within fiction; really, it is all fiction. For the sake of this argument, *fiction* is anything in the story which does not conform to the facts known to be true within the world of the story, like a dead character sitting down for a conversation, as we will see in Munro's "Carried Away." *Fiction* can also be speculation; Munro's characters and narrators often speculate on events which have not happened, events that are contrary to what has happened, or events that the narrator could not possibly remember. Take, for example, William Maxwell's *So Long, See You Tomorrow*, a novel in which a narrator recounts a story he could not possibly know from his childhood. The narrator remembers almost nothing, but builds a coherent narrative from a few specific memories, circumstantial evidence, and much speculation. *Fiction* may also refer to events that the reader knows can not happen in the natural world, as we are not dealing with magical realism. Anything that is *real* is something that is true in the world of the story, and conforms to the reader's perception of what is possible in the natural world.

And indeed, in "Carried Away," the story that opens Munro's collection, something that must be described as *fiction* occurs. Jack Agnew, decapitated thirty years earlier, sits down beside Louisa at a bus stop for a chat about their personal lives. Jack, for obvious reasons, has not had one. This, however, does not stop him from telling Louisa all about his wife and daughter—things that Louisa knows are not true. Agnew says that Grace, his wife, "is not so well. She had some arthritis. Her weight doesn't help it. Lillian is all right. She's married but still teaches high school. Mathematics. Not too usual for a woman" (*Open Secrets* 46). Louisa knows this is not true, she knows Grace has remarried, and that Lillian never finished high school so could not possibly be a high school teacher. These revelations represent what might possibly have happened if Jack lived. Everything Jack mentions seems realistic; that his wife gained weight and his daughter became a teacher is not much of a stretch. This fiction, however, helps Louisa explore her and Jack's place in the world, and their place in relation to each other.

The logic of Jack's appearance is left ambiguous—we do not know if he is a product of Louisa's imagination, a ghost or a dream.

It is possible that Louisa is having a stroke, and some suggest that it is actually Jim Frarey who is sitting beside Louisa while she has what is possibly a hallucination. There is also a chance that Louisa could be making it up; she admits that she speaks to her late husband in her head, “but hardly in a mystical way” (49), and the conversation about the mundane details of Jack’s life is hardly mystical. There is even one line which hints that Jack may have faked his own death: in an attempt to apologize for not saying goodbye to Louisa he says, “the opportunity to leave came up so suddenly” (47). However, as we read on these ambiguities are less troubling and Jack’s appearance seems almost organic to the plot.

Jack’s presence and Jack’s words represent an alternate reality. Branko Gorjup, reviewer for *World Literature Today*, states that, in Munro’s stories “every stone that overturned along the road will reveal another life.” This scene answers the question of what was likely to have happened if Jack had not been killed, what another life might have been like. Jack would not have left Grace for Louisa; perhaps Grace and Lillian’s lives would have been different, but he would not have come into Louisa’s life. Answering this *what if* allows Louisa to understand Jack’s role in her life, to understand how his accident affected her life and the world. Ultimately, Jack would have been an unimportant person in her life had he lived. However, by dying he brought Louisa and Arthur Doud together (as Doud met Louisa while returning Jack’s stolen books), and became an important person in her life only when he died.

In “A Real Life” Munro once again tries to answer a *what if* question. Millicent sees to it that her eccentric friend Dorrie is married off to a wealthy man in order to have “a real life” (75). However, once she is gone and Millicent is left behind she speculates on how Dorrie’s life would have turned out, had she not convinced Dorrie to marry. Millicent thinks about how Dorrie collected walnuts from the grass and she probably, “expected to keep it up until she died.” Millicent speculates on Dorrie’s possible future, not out of pleasure, but because she is unable to avoid it, “at the time of the year when the walnuts would be lying on the long grass.” Millicent misses Dorrie, and imagining the details of the life they could have lived as neighbors helps her recover from the upsetting image of the dilapidated house Dorrie once rented from Millicent. By speculating on mundane details about Dorrie’s life, that, “probably she would have got another dog” (80), Millicent can more easily come to terms with losing her friend. Gorjup, suggests that Millicent is trying to exorcise her guilt for having doubted “the possibility of love and happiness” for Dorrie. Perhaps, she is also feeling guilty for changing Dorrie, who was “remarkable for her integrity and innocence, the genuineness of her interests, and the dignity and worth of her unpretentious and often socially despised avocations” (Martin and Ober 42).

Most importantly, Millicent misses her friend. This speculation is a way for Millicent to keep in touch with Dorrie. After Dorrie got married they did not stay in touch except for a few brief exchanges. These speculations are a way for Millicent to keep the old Dorrie alive and near by—even if she is unwilling to admit it to herself, saying, as she looks at the remains of what was once Dorrie’s home, “I ought to knock that down and sell the bricks” (80). “A Real Life,” like “Carried Away,” gives us two different outcomes, one *fictitious* outcome—an alternate reality—where Dorrie lives her life in the cottage in Millicent’s back yard, and the *real* outcome, where Dorrie is married to a wealthy man and travels the world. In this story it seems like reality and fantasy are switched; from Millicent’s perspective it had a fairy-tale type ending where the poor girl marries the prince.

We see the most willful act of creating fiction in the third story, “The Albanian Virgin.” Charlotte tells the narrator a story which she plans to write out as a movie script. “The Albanian Virgin” actually starts with Charlotte’s story, rather than the frame story of the narrator and her relationship with Charlotte, in such a way that the reader is not immediately aware that it is fiction within fiction. Later, once Charlotte has finished telling her fictional story, we learn more about her personal life. We learn that she reads and has a vivid imagination, but we also learn that the events from her story may mirror her real life. Her husband is not Canadian, and seems like he could possibly be the Franciscan priest from the story she tells. Furthermore, we are never given the name of the heroine for Charlotte’s story, only the mispronunciation on her name: Lottar. It is likely that Lottar is a mispronunciation of Charlotte; they share four of the same letters, in the same order. Here Charlotte is most likely telling a dramatized version of her life story to give meaning to her life at what might be the end of it, as she is in the hospital for a serious illness. The narrator suspects the story may be true, and hints at it, saying, “I never knew why people told me things, or what they meant me to believe” (85). We do not know to what degree the story is fictionalized—Munro leaves this unclear, which says that the truth is negligible, that what is important are the emotions involved in this story, and the relationship between Charlotte and her husband.

The end of “The Albanian Virgin” mirrors the end of Charlotte’s story, with Charlotte and her husband running away from the hospital as Charlotte’s characters run away from the jungle. Perhaps Charlotte’s fiction is imitating her life, or perhaps Charlotte’s life is imitating her fiction, the end is unclear, once again affirming that the truth is negligible, and the story is more important.

Storytelling takes a different form in the next short story, the story from which the collection takes its title, “Open Secrets.” In this story some of the characters gossip and some of the characters tell a fictional story through a children’s song. When Heather

Bell disappears the town is unable to talk about anything else. The disappearance is speculated upon on the radio, in the paper, and at the kitchen table of Frances Wall and Maureen Stephens. Some of the possible explanations include that Heather was picked up by a boyfriend, or was murdered by Mr. Siddicup, Theo Hubbert, or Lawyer Stephens, though the possibility of the latter two is never discussed by the characters in the story. Frances and Maureen continue to discuss these issues because it helps them simplify their world. If they can believe that Heather ran away, or was murdered by Mr. Siddicup, who is now in prison, they can be free from worry. However, if they cannot believe this speculation they will be forced to believe that their lives are in danger, as Theo Hubbert is a free man, and Maureen and Frances live with Lawyer Stephens, for whom there is evidence that he may have been involved in the murder; Maureen herself believes this to some extent, indicated by, among other things, the cryptic line, “[Maureen] was anxious to get him into the bedroom as soon as possible, afraid that he might misbehave elsewhere” (155).

Maureen has a stronger suspicion about Theo Hubbert, which comes to her by an inexplicable vision. Maureen sees Theo, who suffers from an unexplained mental deficiency and is often treated like a child, “punished” by his wife, Marian. Maureen sees Theo’s hand (which she identifies by the color of the sleeve of the jacket he was wearing), “pressed down, unresistingly, but by somebody else’s will—it is pressed down on the open burner of the stove... just long enough to scorch the flesh...in silence this is done, and by agreement” (158). This, however, is a vision and cannot be counted as evidence against Theo—we do not even know if his hand is actually burned, Maureen does not notice a mark on his hand when he is in her home. This vision, like Maureen’s other visions, seem to constitute an alternate reality. Munro writes,

Sometimes when she is just going to sleep but not quite asleep, not dreaming yet, she has caught something. Or even in the daytime during what she thinks of as her normal life. She might catch herself sitting on stone steps eating cherries and watching a man coming up the steps carrying a parcel. She has never seen those steps or that man, but for an instant they seem to be part of another life that she is leading, a life just as long and complicated and strange and dull as this one. And she isn’t surprised. (158)

Maureen’s visions constitute the possibility of an alternate reality, like the alternate realities in “Carried Away,” in which Jack is not killed, and “A Real Life” in which Dorrie does not move away. Maureen’s alternate reality is vaguer, as she just has short glimpses into another life, of other paths she could have taken. Borges’ “The Garden of the Forking Paths” seems to explain these glimpses into an alternate reality and the function of Alice Munro’s fiction within fiction better than her critics.

Jorge Luis Borges’ short stories, similar to Munro’s, often contain a story within a story. In the frequently anthologized “The Shape of the Sword” the story is told by an anonymous narrator, who heard it from a man, who heard it from Vincent Moon—the man who originally tells the story. “The Garden of the Forking Paths” is also a story within a story; the narrator remains unnamed, anonymous, and the body of the text is dictated by another character. “The Garden of the Forking Paths” is the story of an English professor, Dr. Yu Tsen, who is being pursued for treason and, in the mean time, meets a man named Albert, who explains to him the rationale behind a seemingly incoherent novel written by Dr. Yu Tsen’s ancestor, Tsu Pen. Dr. Yu Tsen calls the book, “an indeterminate heap of contradictory drafts” (24). Indeed, much of Alice Munro’s work seems contradictory; in “Carried Away” a man is beheaded and then decades later appears at a bus stop and carries on a conversation as if he had been alive all the years he had been missing. In “The Garden of the Forking Paths” Albert explains, “in all fictional works, each time a man is confronted with several alternatives, he chooses one and eliminates the others; in the fiction of Tsu Pen, he chooses—simultaneously—all of them.” Indeed, Alice Munro chooses several outcomes simultaneously, like Dorrie’s two lives, or Maureen’s glimpses into another dimension. Borges continues, “In the work of Tsu Pen all possible outcomes occur” (Borges 26), as we could say, in the work of Alice Munro several, but not *all*, different outcomes occur.

Another fictional rendering of the disappearance of Heather Bell in “Open Secrets” is offered in the form of the song sung by Heather’s peers. They sing:

And maybe some man did meet her there
That was carrying a gun or a knife
He met her there and he didn’t care
He took that young girl’s life
But some will say it wasn’t that way
That she met a stranger or a friend
In a big black car she was carried far
And nobody knows the end (140)

In the first verse of this song the singers speculate about the chances of Heather being murdered, but then as if to undercut that indication, or soften it, the next verse goes on to speculate that the girl actually ran away of her own free choice. This is how the other children are dealing with this disappearance. If they believed she was murdered, they would be terrified to go off alone. However, if they can convince themselves she ran away, they are still safe. Their perception of the world remains undisturbed.

The title of this story and the collection as a whole, *Open Secrets*, can serve as a definition for this kind of fiction: rather than the truth no one talks about, it is the truth everyone knows, but does not want to believe; a secret that, if kept, allows the keepers to continue their lives unchanged. The *open secret* is a truth that no one wants to believe.

In “A Wilderness Station” Annie Herron tries to convince her brother-in-law, George, to live with an *open secret*: that he had killed his brother in anger. Or, at least that is one version of the story. In “A Wilderness Station” we are given three different stories of the same event: the death of Simon Herron. First, we are told that he was killed by a falling tree limb, and then Annie claims to have killed him with a large rock. Then, in the story that seems the most plausible, we learn that George killed Simon by hitting him with an axe on the back of his head. This most plausible story begins to lose its credibility, however, when we learn about Annie’s dreams about George trying to kill her, which cause us to question her sanity. The end of the story actually suggests that it may have all been a dream. Annie tells Christina a story of a woman who has a premature stillborn baby whose life is saved by being put in the oven and “puffed up to the right size and baked to a good color.” Christina tells her, “that wasn’t possible, it must have been a dream” to which Annie responds, “Maybe so...I did used to have the terriblest dreams” (225), suggesting that Annie can no longer tell her dreams from reality. Annie’s unreliability is further exposed when we learn that she often lies, for no apparent reason, to the children of the family for whom she works as a seamstress, many years later.

In this case, these ambiguities and alternate possibilities are for the reader, rather than the characters. The epistolary mode puts the reader in the position to decide what is true, the same position the protagonists and narrators are in, in the other stories; the character who may be referred to as the interloper in a detective novel has been removed. The end of the story, in which George and Annie attempt to have a conversation, decades later, gives us no hints about the murder, and it is unclear whether they actually exchanged any words at all.

In every story in *Open Secrets* the characters create fiction, and ultimately this is something that unifies the whole collection into a composite novel. In “The Jack Randa Hotel” Gail assumes a fake identity, and writes fictional letters as the old woman whose identity she has assumed. In “Spaceships Have Landed” Eunie’s alien abduction is another instance of a character blurring the line between fact and fiction. We learn, earlier in the story, that Eunie did not differentiate between fictitious radio plays and the news she heard on the radio, and possibly not between real life and dreams. Finally, in “Vandals,” there is another *open secret*: Liza’s sexual assault. As she destroys Bea’s home, it seems her husband

does not know about the reason for the destruction; he believes Bea simply helped Liza pay for college. At the very least, Liza had fictionalized her childhood to her husband. Though some of these stories are considered fringe stories, every story in *Open Secrets* contains some act of fiction making.

This technique of using fiction within fiction, featured prominently in *Open Secrets*, is also seen throughout Alice Munro’s work, most notably in “The Progress of Love,” in which a young woman has a memory of her parents that never happened, and “Meneseteung,” in which a writer explores the life of a poet she never met, through fiction.

In “The Progress of Love” the narrator tells a story about her parents when they were younger. She recalls a scene when her mother inherited a large sum of money from her father, the narrator’s grandfather, when he died. The narrator’s mother hated her father, so when she received the life-changing sum of money she burned it all in the kitchen stove. Whenever the narrator thinks of this, she thinks of her father sitting with her mother and watching her put the money in the stove and burning it: “my father stood and watched her and he never protested. If anybody tried to stop her he would have protected her. I consider that love” (*Selected Stories* 346).

However, near the end of the story the narrator realizes, “My father did not stand in the kitchen watching my mother feed the money into the flames. It would not appear so. He did not know about it.” The narrator, however, held on to her idea of what happened, down to the smallest detail, “I see my father standing by the table in the middle of the room...and there is the box of money on the table. My mother is carefully dropping bills into the fire” (349). Upon facing the truth the narrator still has trouble letting go of the scene she sees in her mind: “How hard it is for me to believe that I made that up. It seems so much the truth that it is the truth; it’s what I believe about them” (350). Ultimately this fiction within fiction affirms the power of fiction: the scene in the kitchen may have never actually happened but it tells us something about the narrator’s father’s personality. From the story we know that he was a sympathetic, resolute and loving man, and we would not understand this as clearly without the story.

In “Meneseteung” the narrator tells the story of the life of an author, Almeda Roth, with many details, including her courtship with a local man, the route she walked home from the local shops, and the story of a day when she made grape jelly. In the end of the story, however, we learn that all of the details have been a product of the narrator’s imagination; she admits, “I may have got it all wrong.” And concludes, “I don’t know if she ever made grape jelly” (497). Even though this story was not the complete truth we know something about Roth; the fiction allows us to

understand women from her time, and what her life was probably like. Though the details could not be entirely accurate we have a richer understanding of the woman than we would have without the narrative.

Chris Bachelder, author of an article concerning literary realism for *The Believer* says it best: “the narrator has become the novelist, building a coherent and dramatic story from the available scraps of evidence” (40). In an example like “Meneseteung” the author is working with little more than newspaper clippings and a brief biography from the back of a book of poetry. Bachelder says that this type of story is, “antirealist...this strand of realism uses realist premise, plot, and technique to suggest the unknowability of the world, the lack of correspondence between narrative and reality.” He continues,

For several decades now, this anxiety about telling stories has been trickling down into our stories...the distrust of authority and knowledge—the anxiety about the reportorial and representational functions of the novel—has created new kinds of stories, new narrative strategies and structures... What the characters and narrators of some contemporary novels come to know is that they don’t know. And can’t. (37)

Munro’s narrators often don’t know what really went on—and can’t possibly know—and are forced to speculate to fill the gaps in their knowledge. They speculate to make their lives make sense, and they speculate to make their lives comfortable. Ultimately, this shows us the role of fiction in all our lives and, as a result, makes a case for the role of literary fiction in society.

As Robert Lecker states, “reading and writing are historically conditioned acts that influence how people define themselves in relation to their community and their present.” We understand our lives through narratives. Munro’s fiction within fiction shows us the relevance of fiction in our lives today—that we need more than facts and details, we need a coherent—if not true—narrative. Jonathan Culler, professor at Cornell University, states, “there is a basic human drive to hear stories” (83). He says, “Stories...are the way we make sense of things” (82). Throughout her work, Munro tells us that we don’t need the truth, we just need something we can believe in that can explain life: the parent’s love in “The Progress of Love,” or the personality of the writer in “Meneseteung.” What we *believe* is often more important and more real than what is actually *real*. Munro’s technique of using fiction within fiction shows this by giving us characters whose lives are completed by the fiction they add to their lives, like the narrator from “The Progress of Love,” or Charlotte from “The Albanian Virgin” or Maureen Stephens from “Open Secrets.” Munro shows us how fiction is important in people’s lives by showing us numerous examples of

characters, for the most part normal people like ourselves, whose lives are made more complete, whose lives make more sense, whose lives have more meaning, by speculating on events which have not actually happened.

Munro’s characters use fiction to make their lives comfortable, to give their lives meaning, and to gain a deeper understanding into who they are. Ultimately, Munro’s work, like *Life of Pi* and *So Long, See You Tomorrow*, makes an argument for the importance of fiction and shows us, the role of fiction in our lives. Lecker goes as far as to say that for Munro, “there is no self beyond the story.” Munro’s use of fiction within fiction allows her to explore the complexities of life, and the concept of the *open secret*: a lie, told to one’s self, for comfort and peace of mind. For Alice Munro reality is inexorably linked with fiction; real life is colored by imagination. Her stories show us how normal lives are influenced, enhanced and completed by fiction. Munro’s work shows us that, yes, fiction does matter.

Works Cited

- Bachelder, Chris. "Doctorow's Brain." *The Believer*. February 2007: 33-44.
- Boyd, Michael. *The Reflexive Novel: Fiction as Critique*. East Brunswick, NJ: Associated University Presses, Inc., 1983.
-
- Culler, Jonathan. *Literary Theory: A Very Short Introduction*. New York: Oxford University Press, 1997.
-
- Fowls, John. *The French Lieutenant's Woman*. Boston: Little, Brown and Company, 1969.
-
- Gorjup, Branko. "Open Secrets" *World Literature Today*. 69.2 (1995). Expanded Academic ASAP. Gale. Maxwell Library, Bridgewater State College, Bridgewater MA. 3 April 2007. <<http://galegroup.com>
-
- Lecker, Robert. "Machines, Readers, Gardens: Alice Munro's 'Carried Away.'" 66 (1998). *Expanded Academic ASAP*. Gale. Maxwell Library, Bridgewater State College, Bridgewater, MA. 3 April 2007. <<http://galegroup.com/>>
-
- Martin, W. R. and Warren U. Ober. "The Comic Spirit in Alice Munro's Open Secrets: 'A Real Life' and 'The Jack Randa Hotel.'" *Studies in Short Fiction*. 35.1 (1998): 417.
-
- Martel, Yann. *Life of Pi*. New York: Harvest Books, 2001.
-
- Maxwell, William. *So Long, See You Tomorrow*. New York: Ballantine, 1980.
-
- Munro, Alice. *Open Secrets*. New York: Vintage, 1994. *Selected Stories*. New York: Vintage, 1996.

Ethnicity and Accountability: Recent American Fiction

STEPHANIE LAWRENCE

Stephanie Lawrence is a senior majoring in English and Fine Arts. She wrote this piece in Dr. Kimberly Chabot Davis' Recent American Fiction class in 2007.

In a 2003 interview with Native American author Sherman Alexie, Robert Capriccioso asked whether fame has made the writer “play more to the mainstream.” Alexie wittingly answered, “No. I don’t even know how. My ethnicity automatically limits me, and then my personal aesthetic limits me even more. And my politics limit me even more. So, even if I had those ambitions, it would be impossible for me to get there” (Capriccioso). Alexie, who has become one of the leaders in Native American literature, recognizes the strong limitations placed upon him as an ethnic writer; he must struggle to create art that appeals to his own aesthetic and politics, while being limited by his ethnicity. He has also recognized how the expectations of others, due to his identity as a Native American, causes hostility and conflict in the literary world.

For the past several years, critics have argued over the degree of responsibility ethnic writers have to represent their people. Minority groups want to be viewed in a positive light. However, this can be problematic for ethnic writers because positive representations may directly conflict with an author’s experiences or accuracy. This drastically limits ethnic writers, and if they choose to avoid this so-called responsibility, they experience public scrutiny. In Sherman Alexie’s *Reservation Blues*, the relationships and descriptions of characters in the Band, Coyote Springs, translates to the larger scale dilemma of responsibility for ethnic writers to represent their people. Furthermore, I propose that even though Alexie does write literature with his people’s best interests in mind, he should not always be expected to portray his people positively because he has mixed responsibilities as a Native American and as an artist.

The characters in *Coyote Springs* and other Native Americans’ reactions to the Band portray Alexie’s views on the issue of representation. As the lead singer of Coyote Springs, Thomas Builds-a-Fire is constantly given a position of power and represents all members of the Band. Alexie emphasizes this numerous times throughout the text. While driving to a performance, Coyote Springs gets lost and stops to ask an old woman and her granddaughter for directions. Before answering, the women ask, “Who’s the lead singer?” Thomas answers and the granddaughter explains the directions, speaking directly to Thomas. Junior is angered by this, saying, “Ain’t that the way it always is? They only want to talk to the lead singer. All they want to know is the lead singer. Lead singer this. Lead singer that” (Alexie 51). This issue comes up numerous other times throughout

the novel. Each time a character specifically asks for Thomas because of his title as lead singer, Thomas seems completely unamused. He does not necessarily want the burden of being the spokesperson for the Band; that role is just assigned to him automatically by other people.

Alexie has created a character who is given the burden of representing others, which parallels his responsibility as a Native American writer to represent his people. The degree of responsibility ethnic writers have to accurately display their culture is a highly debated issue. "Aren't writers of one ethnic group or another inevitably labeled as being spokespeople, whether or not they desire this designation?" (Milofsky). Kenneth R. Roemer questions the role of the American Indian writer. He asks, "Should (he) be a committed and independent artist, a representative, a mediator, an advocate? The ethical pull toward representation and advocacy is strong. But how can one voice represent more than 560 federal recognized (and several hundred hope-to-be recognized) tribes?" (Roemer 19). Alexie recognizes this dilemma and calls attention to it in the interview with Capriccioso. When asked, "Would you consider yourself a self-promoter or an Indian promoter?" Alexie answers, "I'm not an Indian promoter because I don't know Indians; I don't know all of them. Comparatively, I know very few. How many Indians am I close to? 500, 200, 100, 10? I didn't know anybody can promote a race. I just laugh when I hear Indian artists say, (stoically) 'I'm doing this for my people.' Bullshit!" (Capriccioso). Alexie sees that, like Thomas trying to play his music, he cannot write literature without understanding and reacting to his identity as a Native American because society has already determined that as an ethnic writer, he must write literature that represents his people, ideally in a positive way. It is clear that Alexie realizes the absurdity of this because one man cannot stand in for a universal "Indian identity." With nearly 600 different tribes, each having completely different customs, traditions, and practices, it is unfair and impossible for one man to stand in for and please everyone.

Since much of the literary world seems to think a spokesperson is necessary, it raises the question, Who should be allowed to be the voice of the people? Who will represent the majority? Roemer believes that:

The authority is primarily grounded in the experience of 'being Indian'. . . But defining who is an 'insider' today can be difficult. Considering the diversity of tribal cultures and the fact that more than half of the Native American population lives in diversified cities and suburbs, it is not surprising that different groups of Indians and non-Indians emphasize different Indian identity criteria, especially blood quantum, tribal membership, community opinion, commitment, and self-concept. These different emphases,

combined with valid anger about pretend Indians and their publishers with sometimes less-than-valid hostility fueled by personal motives, can generate great tensions within the community of Indian writers.

(Roemer 18)

Alexie addresses this issue in *Reservation Blues* using the simplified model of the Band. Betty and Veronica, two white women, are the groupies for Coyote Springs. These women "both had long blonde hair and wore too much Indian jewelry. Turquoise rings, silver feather earrings, beaded necklaces" (Alexie 41). These women cause turmoil among other Native Americans when they join Coyote Springs as back-up singers. It is controversial because they are pretending to belong to a culture that is not their own.

Betty and Veronica represent those authors who write Indian literature in order to gain fame and feel accepted. Once Coyote Springs fails their audition, Betty and Veronica are signed by Cavalry Records and will pose as Native Americans. When trying to convince the manager to sign the women, Sheridan claims that the women are part Indian because, "they had some grandmothers or something that were Indian. We can still sell that Indian idea. We don't need any goddamn just off-the reservation Indians. We can use these women. They've been on the reservations. . . Don't you see? These women have got the Indian experience down" (269). In his essay, "Muting White Noise: The Subversion of Popular Culture of Narratives of Conquest in Sherman Alexie's Fiction," James Cox believes Sherdian is implying that, "with modern technology, anyone can be Indian, as long as they are Euro-American defined and constructed. Vanishing race rhetoric is implicit in these passages; to have Indian music, Cavalry Records does not need Indians" (Cox 63). Again, Alexie includes Betty and Veronica's characters to make a statement on the issue of representation.

The reactions of other Native Americans to the band in the novel can be compared to how Native Americans react to Alexie's fiction and other authors writing Native American literature. In an Open Letter to the Spokane Tribe, the Weillpinit Rawhide Press writes about the ability of Coyote Springs to represent the Spokane people. Alexie writes:

As you know, Coyote Springs, our local rock band, has just returned from Seattle with two white women. They are named Betty and Veronica of all things. I'm beginning to seriously wonder about Coyote Spring's ability to represent the Spokane Tribe. . . Secondly, the two Indian women in the band are not Spokanes. They are Flathead. I've always liked our Flathead cousins, but Coyote Springs is supposedly a Spokane Indian band. We don't even have to talk about the problems caused by the white women. We have to remember

that Coyote Springs travels to a lot of places as a representative of the Spokane Tribe. Do we really want other people to think we are like that band? Do we really want people to think that the Spokanes are a crazy storyteller, a couple of irresponsible drunks, a pair of Flathead Indians, and two white women? I don't think so. (Alexie 176)

This can be almost directly compared to how many Native Americans probably viewed *Reservation Blues*. The Spokane people want to be represented positively, both in the novel and in reality. Like the newspaper asking "Do we really want other people to think we are like that band?" Spokane Indians clearly do not want other people to think they are the way they are often represented in Alexie's literature.

One way to approach this problem is to consider that all authors, regardless of their skin color, should be able to create literature that satisfies their need to create art. All artists have a responsibility to themselves to use art as a means of expression, a way to say whatever needs to be said regardless of how other people will respond. Oftentimes, authors write about what they know and what most affects their life. Therefore, it makes sense that authors like Alexie would write about reservation life and their struggles as Native Americans. From an artistic perspective, it is an author's right to create fiction based on these experiences; it does not have to be accurate or show people positively. Alexie completely recognizes this and has been violently critiqued because of it. In the Cappricioso interview, Alexie was asked, "Do you feel like you have sold-out your own people?" Alexie responds:

I've made my mistakes about subject matter, things I probably shouldn't have written about. And that was a personal and moral choice to stop writing about those events. I didn't have to, and even if I had continued to write about them, it was my prerogative. You know, as an artist, it's not my job to fit in; it's not my job to belong. I'm not a social worker; I'm not a therapist. It's my job to beat the shit out of the world. I'm not here to make people feel good. (Cappricioso)

Alexie understands his role as a writer is to create his art. He is often criticized for showing Native Americans in a stereotypical light. However, it is his right as an author to do this. He tells his audience, "That's another thing about being Indian and an artist, people assume I have some sort of social responsibility to everyone. I don't. All I owe to the world is my art. People can either read it or not watch it, that's their decision" (Cappricioso).

Despite, Alexie's perspective on writing, critics continue to frown upon Alexie's characters, claiming that they do not show Native Americans positively. Author and critic Louis Owens writes in his book, *Mixed Blood Messages*, how:

Alexie's fiction. . . too often simply reinforces all the stereotypes desired by white readers; his bleakly absurd and aimless Indians are imploding in a passion of self-destructiveness and self-loathing; there is no family or community center toward which his characters. . . might turn for coherence; and in the process of self-destruction the Indians provide Euramerican readers with pleasurable moments of dark humor or the titillation of bloodthirsty savagery. Above all, the non-Indian reader of Alexie's work is allowed to come away with a sense that no one is really to blame but the Indians, no matter how loudly the author shouts his anger. (79)

Although Alexie does sometimes create stereotypical characters, Alexie's character Thomas defies the stereotypical Native American often pictured by uneducated readers. Unlike other Native Americans on the reservation, Thomas does not drink. In addition, "Indian women had never paid much attention to him because he didn't pretend to be some twentieth-century warrior, alternating between blind rage and feigned disinterest. He was neither loud nor aggressive, neither calm nor silent" (Alexie 4). Unlike Victor and Junior, Thomas has no interest in white women and instead falls in love with Chess and treats her with the utmost respect. Thomas is a perfect example of a character who rises above his circumstances and makes a better life for himself. By creating Thomas, Alexie is dealing with a complicated issue. By juxtaposing Thomas with other stereotypical Native Americans, the reader sees a positive image of a Spokane Native American, but Alexie is still able to represent reservation life the way he sees fit as an artist.

Alexie makes it very clear that it is the white man who has put and kept the Native Americans in their current situation. The motif of the screaming horses repeats throughout the novel. The horses represent the epitome of vulnerability because they had no way to fight back against the white invaders. Similarly, the Native Americans not only suffer because of their past abuse, but the limited resources provided by the government have made it difficult for them to escape the reservation. Again, this can be compared to the Band. Coyote Springs needs money in order to make a better life for themselves. But to do this, they are completely dependent on agents Wright and Sheridan. Alexie was sure to give them the same names as General William Sheridan and General George Wright, who were two real army officials responsible for the genocide of the Native Americans. Just as these military men oppressed the Native Americans in the past, present day white figures are oppressing Native Americans today. Alexie is showing the struggles Native Americans are still facing because of white mistreatment, and through Thomas, he is showing that it is possible to step forward and overcome oppression. Therefore, he is writing fiction that is representing his people beneficially.

Sherman Alexie is a clever Native American writer who has managed to subtly depict the conflict of an ethnic writer's responsibility to portray others by using the characters in the Band, Coyote Springs, in his novel, *Reservation Blues*. An ethnic writer is constantly faced with the demand to create art that will represent his/her people in a positive way, but the writer will never be able to please everyone. For this reason, I believe critics and readers should consider that ethnic writers have a responsibility to both their art and to their people. Authors should be allowed to create art that will satisfy their needs as artists without automatically limiting themselves in order to please others. If ethnic writers such as Sherman Alexie were not "automatically limited" by their race, there is no telling what more they may be able to contribute to the world.

Works Cited

Alexie, Sherman. *Reservation Blues*. New York: Grove P, 2005.

Capriccioso, Robert. "Sherman Alexie Interview." Identitytheory.com. 3/23/2003. 12/4/2007. http://www.identitytheory.com/interviews/alexie_interview.html.

Cox, James. "Muting White Noise: The Subversion of Popular Culture's Narratives of Conquest In Sherman Alexie's Fiction." *Studies in American Indian Literatures*. 9(1997): 52-70.

Milofsky, David. "A Hard Look at American Indian Writers." *The Denver Post*. 9/02/2006.

Owens, Louis. *Mixedblood Messages: Literature, Film, Family, Place*. Oklahoma: Norman U of Oklahoma P, 1998.

Roemer, Kenneth M. "Introduction." *The Cambridge Companion to Native American Literature*. Cambridge: Cambridge UP, 2005.

The Modernization of Resistance Latin American Women since 1500

MELANIE BYAM

Melanie is a senior at Bridgewater State College and wrote this paper for Dr. Erin O'Connor's course on Latin American Women and Gender. Melanie is currently writing her thesis on a similar topic and applying to graduate school to continue exploring her passion for all things Latin American.

While the term feminist may be fairly new, the idea that women must resist their environment is an historic battle. In Latin America, gender has remained a key element in life since the pre-colonial era. From the destruction of complementarity to its revival in the twentieth century, the upward struggle against patriarchy has existed. Patriarchy is an ever-evolving entity, so the methods used to resist it must also be ever-evolving. While today, we see a conscious effort on the part of men and women to eliminate its presence, its malleable past gives it the image of immortality. Throughout history, Latin American women have used any means necessary to resist patriarchy in any form. They have both embraced and rejected social norms, as well as fought side by side with men, but patriarchy has not been defeated because of its ability to adapt.

Beginning in the late fifteenth century, European nations began colonizing Latin America. By instilling a strong patriarchy over the inhabitants of the nation, and manipulating gender roles, the European *conquistadors* formed a central government that was not defeated for over three hundred years. Women found many ways to resist this patriarchy including maintaining indigenous culture, witchcraft, and religion. By the sixteenth century, the formation of a Spanish colony in Peru had destroyed Andean complementarity and culture in an attempt to “civilize” Peru to fit European values. Irene Silverblatt presents a clear and precise view of how resistance formed out of this forced acculturation. An early Spanish colonial, Noboa, on a quest to “root out pagan and idolatrous traditions,”¹ brought charges against a women’s religious cult as witches. Women, in order to fight this onslaught of culture, clung to their indigenous ways. Silverblatt offers a choice example of this resistance with the women of the Puna. As the Spanish rose to patriarchal power, certain indigenous men were permitted to rise in the political ranks. Indigenous women, however, were marginalized and therefore fell under the radar. A good number of women, some who had not yet been converted to Christianity, fled to the mountains, or Puna region, of Peru, to resist European culture and “attempt to re-create the ‘female component’ of Andean lifeways, as well as the social relations and ideology which governed their [ancestor’s world].”² The Puna allowed women to resist Spanish culture by maintaining their own. This was an especially useful method of resistance, and women came to represent indigenous culture. Since they were not given the

1. Irene Silverblatt, *Moon, Sun and Witches* (New Jersey: Princeton University Press, 1987), 32.

2. Silverblatt, 209.

chance to rise politically, it was easier for them to maintain their ancient culture. This method did not fall on deaf ears as it was revived in the indigenous movements of the twentieth century.

To remain in the colonial period, however, Silverblatt opens up one other very important form of resistance, witchcraft. Women manipulated the fear that accompanied witchcraft to empower themselves. Witchcraft often fell under unintentional resistance, but was resistance all the same. In an attempt to “Christianize” Peru, women’s customs of healing were seen by colonials as witchcraft. These convictions, however, became an indirect gift of power. Men, especially Spanish men, feared the unknown source of women’s power to heal, and inadvertently allowed them to make powerful social commentary. One example that Silverblatt offers is the image of “[t]he devil as a Spaniard.”³ Women, when portraying these “images” they had seen, portrayed the devil as a Spaniard, thus, making powerful social commentary without retribution. In backlash of their patriarchy over cultures, the Spanish fear of the unknown gave women the prerogative to resist the colonists and their religious views.

Women of African descent also used religion to make powerful social commentary in the colonial period. Ursula de Jesus was a religious servant, a position very low on the church’s totem-pole, placed there for being both poor and non-white. Ursula, unlike the indigenous women of Peru, embraced the religious beliefs of the church to resist the patriarchy that had oppressed those in her position. Ursula claimed that spirits of loved ones passed on came to her in visions giving her messages of reprove toward those in power. Since she was truly believed to have the power of vision, she was able to use these “visions” to move her way up in the hierarchy and resist the current patriarchy, until she was in a very high position considering her race and class, a *donada*. By interceding “on behalf of troubled souls [...] she served as a source of moral authority and as a disciplinary measure,”⁴ used the European faith to reprimand those with more power, and found ways to punch holes in the patriarchy of the church.

Ursula de Jesus was not the only colonial-era religious woman to use the convent as a means of resistance. Sor Juana Ines de la Cruz, used the church to pursue her goals of a masculine education. Sor Juana manipulated the social values of the time by becoming a nun, and rejecting the only other honorable choice, marriage, and its inherent patriarchy. Entering the convent allowed women to remain respectable, but also to attain a certain sense of freedom. However, in the case of Sor Juana, she pushed the envelope too far. Hers was “a life of struggle toward salvation in a world of

troubling contradictions,”⁵ despite the fact that she was perhaps one of the most brilliant minds in history. A child prodigy, she entered the convent to continue her studies without the shackles of husband or child. She was resisting against the patriarchy that loomed over her in marriage and attempted to manipulate those same values to reach her goals. Not only did she seek to learn, but sought to get recognition for her knowledge. It is perhaps the latter that sent her dreams a step too far out of reach. At the age of fifteen for example, she was invited to a conference in Mexico in which men challenged her with equations of mathematics which she easily solved. The problem this presents is that she wished to gain acknowledgement for her education. She wished to be like, “the Queen of Sheba, so learned she dares to test the wisdom of the wisest of all men.”⁶ Unlike the Queen of Sheba, however, she must come up against patriarchy of the church and state. The church wishes to limit her learning to the study of God, while the state wishes for “respectable women ‘to remain at a distance from the mundane affairs of the public and stay shut up in their houses.’”⁷ Perhaps it is the duality of the patriarchy that caused her resistance to fail, and in the end, her passion for learning was indeed quelled.

While most forms of resistance mentioned have been on the subtle side, historians start to explore stronger, blatant forms of resistance nearing the end of the colonial period. As countries near the stage of revolution, women begin to take the forefront and play important roles. Micaela Bastida Puyucagua resists both the patriarchy of colonialism and the patriarchy of the home. She fought side by side with her husband Jose Gabriel Tupac Amaru in a Peruvian Indian revolt in 1780. “During this struggle, [...] Amaru’s chief aid and advisor remained his wife, Micaela Bastidas Puyucagua.”⁸ Not only did she stand up to the system, militantly, but she stood up to the patriarchy that exists in her own life as well. In her letter to her husband she says about his lack of progress, “You made me a promise, but from now on I shall not place any faith in your promises.”⁹ She stands up strong against a husband, which could prove to be dangerous during those times. Micaela uses warfare and rejection of social values to resist patriarchy of state and home. In a sense, Micaela’s story is also an example of maintaining one’s culture as a form of resistance. Tupac Amaru’s

3. Silverblatt, 182.

4. Nancy E. Van Deusen, “Ursula de Jesus; A Seventeenth-Century Afro-Peruvian Mystic,” In Kenneth J. Andrien, eds. *The Human Tradition in Colonial Latin America*. (Wilmington, DE: SR Books, 2002), 97.

5. Sor Juana Ines de la Cruz “Letter to Sor Filotea” in *Colonial Latin America* Chapter 6 (1691): 207.

6. Ines de la Cruz, 213.

7. Ines de la Cruz, 207.

8. Micaela Bastidas Puyucagua, “Indian Revolt in Peru,” in June E. Hahner, eds. *Women in Latin American History: Their Lives and Views* (Los Angeles: UCLA Latin American Center Publications, 1980), 35.

9. Bastidas Puyucagua, 37.

claim to revolt was that Peru might return to the mighty Incan culture, and one vital part of this culture was complementarity. He could not have been a king without a queen, a *coya*, and he and his wife resisted patriarchy of state by maintaining the complementarity of their Incan culture.

During the period of Independence and Progress, roughly the nineteenth century, women were forced to find alternative methods of resistance as the patriarchy they faced was now that of their own countrymen, rather than those of foreign invaders. Now, women had to adapt their resistance to resemble support of state and home. While under European rule, the ultimate patriarchy was that of elite whites over the poor indigenous peoples, whereas in the nineteenth century we see a reformation of patriarchy centered in the home, simply with men over women and children. While many believed that their problems would be solved by independence, the problems of women remained. Most women who were considered feminists of the time did not advocate for major changes, but usually for the education of women. The problem with this notion is that the state also advocated for education of women, but for the betterment of the state. More intelligent women made better mothers, who mothered better citizens. By giving women a proper nationalistic education, they were sure to raise proper patriotic sons which could only benefit the state.

One feminist who took this agonizingly slow approach to reform was Teresa Gonzalez de Fanning. She pleads for the education of women, but for the benefit of the state, in her "Concerning the Education of Women." She later set up a school to teach these ideas which became very popular with liberal elites. She declares that, "The soul of a child is a blank book, where it is up to the father and more especially to the mother to write the first few pages."¹⁰ She even goes so far as to say that the uneducated women of Peru were at fault for the defeat at the War of the Pacific. Gonzalez was part of a train of feminists in the nineteenth century who "resisted" by preaching pacifist education as opposed to rights and policies. As she says, "It is [the mother] who must shape the men of tomorrow, the future citizens."¹¹ She does not ask that women become citizens by name, but that they educate themselves to make their sons better citizens. Feminists like Gonzales de Fanning were so limited in their push for resistance because it was inherent that women were not citizens. The patriarchy created by independence was perhaps stronger than it had been under colonialism because of the masculinity involved in independence, and the sense of power felt by these formally emasculated men.

10. Teresa Gonzalez de Fanning, "Concerning the Education of Women," in *Women in Latin American History* (Los Angeles: UCLA Latin American Center Publications, 1980) 34.

11. Gonzalez de Fanning, 34.

Another famous Latin American Progressive era feminist is Clorinda Matto de Turner. In Matto de Turner's novel *Torn from the Nest*, she argues for the betterment of both women and indigenous people. First published in 1889, the story depicts the struggles between the landed elite, wealthy city folks, and indigenous peoples. Matto starts with a plea for the poor. The family of Juan Yupanqui, pawns in a grand scheme of landed elite to extort funds from the poor, pleads for assistance from the wealthy Don Fernando and his wife Lucia. In the novel, government officials leave large, unwanted loans with poor families and one year later collect on the loan with high interest. Lucia is a "generous hand that offers help in supreme distress,"¹² and is able to help the Yupanqui's with this breach of justice. Throughout the novel, the cruelties of the rural government are revealed in a creative fashion, portraying cruelties of both church and state. Matto's resistance and plea for the poor is more pronounced because many of the Independence government officials came from poor backgrounds. Her stance on feminism, however, must be more subtle.

Lucia is a very educated woman. She can sew, and stitch, and read as well. While she is also naïve, she is sure to raise proper citizens. Because of these things, she is happily married, well occupied and able to help her community members. When Lucia and Fernando adopt Yupanqui's oldest daughter Margarita, Marcela Yupanqui hopes that, "[her daughter will] learn to sew and do that pretty embroidery they say Senora Lucia knows how to do."¹³ The message given is that learning to make yourself a better wife will allow you to lead a happy, productive life. The methods of Progressive resistance do not change much over time because of a fear of officials that people will revolt again. In Matto's forum, limited by the patriarchal government, she must preach women's rights in small doses.

There were some feminists of the time, however, who used education as a tool to gain rights. Francisca Senhorinha da Motta Diniz spoke of education as a form of resistance. She did not believe that women were utilizing all of the rites they already had because they were uneducated. She believed that "Women's emancipation through education is the bright torch which can dispel the darkness [...] and bring us to a civilized society."¹⁴ She asked women to use all of their assets, "their moral beauty and the force of their intellects,"¹⁵ to boldly demand political rights such as the right to vote and to be elected to office. She was asking

12. Clorinda Matto de Turner, *Torn from the Nest* (New York: Oxford University Press, Inc, 1998).

13. Matto de Turner, 48.

14. Francisca Senhorinha da Motta Diniz, "What Do We Want?" in June E. Hahner, eds., *Women in Latin American History—their lives and views*. (Los Angeles: UCLA Latin American Center Publications, 1980) 54.

15. Senhorinha da Motta Diniz, 54.

for equality, something that most feminists of the time fell short of. Senhorinha was resisting the popularity of falling in with the trend that many women did: find a good husband, be a good wife. She was, instead, begging women to resist that temptation, the easier road, for one more educated and defined.

During the first half of the twentieth century, progress under the independence regimes appeared to have failed, and countries underwent revolutions against these governments. During the Mexican Revolution, women stood in the resistance of this independence patriarchy, and many played important roles as camp followers and even soldiers. In the famous case of the *soldaderas*, women fought as soldiers in the Mexican revolution.¹⁶ However, just as is the case with independence regimes, so was the failure of most revolutionary regimes, and soon after revolutionary victory, the memory of these women was soon lost. Mary Kay Vaughan does not consider the revolutionary regime of Mexico one free of patriarchy, but rather a new patriarchy, a modernized patriarchy. Admitting that women were so vital to victory would put into question the claim to patriarchy that government officials held. Women of the post-revolutionary regime now faced not only patriarchy, but the modernization of that idea which “retained, perhaps even strengthened the patriarchy.”¹⁷ Women had to once again adapt their methods of resistance toward this new type of patriarchy. Like the Progressive Era, revolutionary governments granted women education but “to subordinate the household to the interests of national development.”¹⁸ Revolutionary leaders fell short of their goals, and military leaders, such as those of the *Zapatos*, were perhaps as cruel and harmful to the poor, nonwhite Mexicans as the previous leaders had been, because the true beneficiaries of the “Justice, land and water,”¹⁹ were elite, white men. Women were unable to adapt to this new patriarchy, in a strong sense of resistance, until the 1950s.

One of the first powerful speakers for women and the poor was Carolina Maria de Jesus. In the 1950’s, she recorded her daily comings and goings in the world of the *favelas* of Brazil. Some readers consider the repetitiveness of the novel too much, but it is important to her story that she reiterates day after day that she “went to collect paper... cooked... went to collect more paper.”²⁰ Moment after hopeless moment the empty void of her life drags

on. She lives only to support her children. In her brave story, she attacks both the men of the world and patriarchy. First, she rejects the patriarchy of marriage by remaining unmarried, and reveals that most men, defeated by the thought of their own poverty, cling to their wives for survival. She also rejects the patriarchy of state through the claims of her story. She exclaims, “In our country, everything is weak. Democracy is weak and the politicians are very weak.”²¹ Because she became a mother, she lost her job and in effect her home. Her state, preaching democracy and equality, falls short of those promises when it comes to the poor and the non-white. She tells a tale of the modernization of poverty which becomes synonymous with women. Carolina resists the patriarchy of the government by detailing the depravity that exists in her country and bravely pointing out those responsible.

In the last part of the twentieth century, women were forced to adapt their resistance yet again. Their methods included military force, their label as mother and the return to their roles as protectors of culture. During this period, we see the emergence of leftist groups disguised as feminist supporters. However, after these leftist regimes come to power, we see that women do not fully exercise all of the rights they have gained. On top of that, the promises made to them have not been kept. During these leftist revolutions, women played important roles as soldiers, spies and even army generals. They rejected the patriarchy of their former government to practice the rights provided by their political ties, and fight side by side with men. Women, even after being given these rights, were still forced to fight patriarchy existing in the army. Men were reluctant to follow the command of a female, and yet again the resistance of women was forced to mutate as they were now forced to fight patriarchy from below: men of lower status who maintained control because of the firm patriarchy in place. To strengthen resistance, women assert their control to prove to men that as leaders they are successful. From her time as a soldier in the Nicaraguan Revolution, Ana Julia, remembers, “It was necessary for [them] to realize that we women had earned our right to participate in the struggle.”²² Nicaragua, as well as Cuba, was helped greatly by women, and their assistance played an important role in resistance for women’s rights and the rights of the poor. The question remains, however, will these promises be kept and these rights remain?

After the victories of these socialist revolutions, the true realization of equality for women was never truly reached. The unisex military forces were broken up, and according to heads of the nation, “It’s not because women comrades aren’t capable... you might say it’s because of failings on the part of some men, comrades who haven’t had the experience of fighting alongside

16. Class notes, 12/13/06

17. Mary Kay Vaughan, “Modernizing Patriarchy,” in Elizabeth Dore and Maxin Molyneux, eds. *Hidden Histories of Gender and the State in Latin America*. (Durham: Duke University Press, 2000) 194.

18. Vaughan, 194.

19. Martinez, Pedro. “The Revolution,” in *Pedro Martinez: A Mexican Peasant and His Family* (1964): 88, 92-94.

20. Carolina Maria de Jesus, *Child of the Dark* (New York: Penguin Group, 2003).

21. Maria de Jesus, 31.

22. Margaret Randall, “The Women in Olive Green,” in *Sandino’s Daughters*, (Toronto: New Star Books, 1981), 133.

women.”²³ This general claims that men will not be able to overcome their sexism, while during the revolution men and women worked together to attain victory, and with few issues. Women are, of course, certainly given more rights under these regimes, but as we have seen before, these rights were for the betterment of the state. They are, for example, permitted to work, even after marriage, without dishonor. Why the change of heart? Margaret Randall explains that, “In order to conquer underdevelopment, society needs the contributions of all of its members, both men and women.”²⁴ Women had to work to allow the country to flourish. The failure of these countries to defeat patriarchy is seen in the film *Portrait of Teresa*. Teresa, her husband Ramon, and their two sons, live in communist Cuba and the practice of this equality is juxtaposed to the promise of equality. Teresa is held back from what she truly desires, and allowed to work simply to support the family, because Ramon feels that his role as patriarch is threatened when he is no longer sole bread-winner.

Aside from socialist regimes, other extremist governments came to Latin American power, including the military *Proceso* in Argentina, infamous for the disappearance of any government nay-sayers. One important group that emerged in resistance was *Las Madres de Plaza de Mayo*, also known as the Mothers of the Disappeared. Marysa Navarro depicts the heroic rise of this all female organization from a small group of mothers to an international powerhouse in “The Personal is Political.”

The group joined other human rights organization in their efforts to publicize the plight of the disappeared in Europe and the United states. The Madres established contacts with human rights organizations in other countries, lobbied for support among foreign congressmen, [and] testified wherever they were invited to do so.²⁵

Being composed entirely of women, the group could embrace the patriarchal view of motherhood to work toward their main goal: finding their children at any cost. Compared to other militant protestors, the mothers escaped almost unscathed because they tapped into that motherhood revered by society.

The last stance to discuss in the twentieth century evolution of

23. Margaret Randall, “Appendixes”, in *Women in Cuba: Twenty Years Later* (New York: Smyrna Press, 1981), 139.

24. Randall, 140.

25. Marysa Navarro, “The Personal is Political: Las Madres de Plaza de Mayo,” in Susan Eckstein, ed., *Power and Popular Protest; Latin American Social Movements*, (Berkley: Univ. of Cal. Press, 1989).

resistance is the Indigenous Movement. Women and men joined together to redefine and strengthen their culture. To fight the patriarchy of the white elite, these indigenous people joined together for the greatest claim to prosperity, land. “Land has historically been a principal demand of Ecuador’s indigenous movement.”²⁶ Land, since the dawn of colonialism, has been the ultimate claim to power and independence. In an act of resistance, the indigenous government official Nina Pacari, of Ecuador, has been fighting for this symbol of power since her rise in government. Pacari, like other indigenous women, stands firmly to her indigenous dress and customs as a resistance of the patriarchy that keeps her people oppressed.

While Pacari blatantly speaks out against the government she works for, others have taken more subtle routes. Since the pre-Columbian days women have resisted in any fashion they can create. They have been forced to fight imposing religions and governments, modernization and patriarchy. They have used all of the tools given to them, including the social values they intended to eventually destroy. Through protest and literature, and simple rejection of social codes, women in resistance continue to fight that battle today. The idea of resistance will probably never end because the battles continue to morph. The situation women are in today is not the same as it will be in ten years, so their methods must adapt if they are to progress. Resistance, for women, will never end as long as they are forced to adapt to new situations.

26. “Nina Pacari”, in *Notable Twentieth-Century Latin American Women*, 220.

Works Cited

Alberro, Solange. "Beatriz de Padilla: Mistress and Mother." *Struggle and Survival in Colonial America* (1981): 251

Bastidas Puyucahua, Micaela. "Indian Revolt in Peru." June E. Hahner, eds. *Women in Latin American History: Their Lives and Views* (Los Angeles: UCLA Latin American Center Publications, 1980), 35.

Gonzalez de Fanning, Teresa. "Concerning the Education of Women." *Women in Latin American History* 1980: 34.

Ines De La Cruz, Sor Juana "Letter to Sor Filotea" *Colonial Latin America* Chapter 6 1691, 207

Maria de Jesus, *Carolina Child of the Dark*. New York: Penguin Group, 2003.

Martinez, Pedro. "The Revolution." In *Pedro Martinez; A Mexican Peasant and His Family* (1964): 88, 92-94.

Matto de Turner, Clorinda. *Torn from the Nest*. New York: Oxford University Press, 48.

Marysa Navarro, "The Personal is Political: Las Madres de Plaza de Mayo." Susan Eckstein, ed., *Power and Popular Protest; Latin American Social Movements*. Berkley: Univ. of Cal. Press, 1989, 253.

Randall, Margaret, "The Women in Olive Green." *Sandino's Daughters*, Toronto: New Star Books, (1981), 133

Senhorinha de Motta Diniz, Francisca. "What Do We Want?" *Women in Latin American History* (1980): 54.

Silverblatt, Irene. *Moon, Sun and Witches*. New Jersey: Princeton University Press, 1987, 32.

Soeiero, Susan A. "Catarina de Monte Sinay: Nun and Entrepreneur." David G. Sweet, eds. *Struggle and Survival in Colonial America*. Berkeley: University of California Press, 1981, 258.

Van Deusen, Nancy E. "Ursula de Jesus; A Seventeenth-Century Afro-Peruvian Mystic." Kenneth J. Andrien, eds. *The Human Tradition in Colonial Latin America*. Wilmington, DE: SR Books, 2002, 97.

Vaughan, Mary Kay. "Modernizing Patriarchy," *Hidden Histories of Gender and the State in Latin America 2000*, 194-196, 201.

Weinstein, Barbara. "Unskilled Worker, Skilled Housewife." John D. French and Daniel James, eds, *The Gendered Worlds of Latin American Workers*. Durham: Duke University Press, 1997, 72.

"Nina Pacari", in *Notable Twentieth-Century Latin American Women*, 220.

Turning Tides

ALEX PERRY

Alex is a junior majoring in communication studies. This creative non-fiction piece was written under the mentorship of Dr. Kathryn Evans. He plans to attend graduate school in Los Angeles, and pursue his dream of filmmaking. He enjoys running at night, eating candy hourly, and conversing with others.

My eyelids shoot open in unison with the shade moving up quickly past my window. The beams of sunlight find their way to me, giving me an excuse to close my eyes again. What a beautiful day it must be, and after a rejuvenating twelve hours of sleep, a person could take full advantage.

I am wide awake but tired, still tired enough to add another twelve hours to the count. Whoever did me the kind favor of opening my shade leaves the room while trying to make as much noise as humanly possible in a five yard walk, but my sleeping powers cannot be overcome by such an attempt. My eyes threaten to close again, leading me into another escape, but the alarm placed on the stand next to me has different plans. The noise is low at first, but soon it will be unfathomably loud, and equally unpleasant. My hand quickly finds its way to the button on top, ending the noise in an instant, but it does not return to my side. Instead, it hovers over the clock, frozen in a position of terror as I feel all control slip away. The dark figure next to me is pressing the cold steel of his blade against my head, and I try not to move, only focusing on meeting his demand. “Again” he demands in a familiar hiss. I comply, and without a moments hesitation my hand drops down once again on the clock as I push the button a second time.

Running will not be necessary this morning, of course. He will find me no matter where I disappear, and there will be no mercy; more demands will come. Though it will seemingly make no difference at all, in this moment of imprisonment I am able to pause and reflect.

It was not always like this. There was a time when he was not around. If my memory serves me correct, he was non-existent during my childhood. Perhaps I was simply not looking closely enough, and there he was around every corner, watching and waiting for the right time to strike.

Like any truly intelligent nemesis, he befriended me first, and offered to keep things on track if I simply completed his tasks. I touched a railing in my house. “Could you touch it three more times please?” he would pleasantly ask. “Possibly four more now?” he continued. “Okay, twelve times should seal the deal.” It was nothing.

So how did it come to this? Lying here frozen and at his mercy as he threatens to end me. I prefer not to dwell on the journey, and I keep it tucked away safely in the back of my mind.

I meet every demand he throws my way now; an inescapable pattern that rules the day. However, I cannot help but notice the fear in his eyes this morning. Something is different, and he is aware of it. I know exactly what it is, and it is mine to keep far away from his line of sight. It is in fact my only weapon against him, and if I were to hand it over, my hope would be attached to it, and along with that, my life. In the moment of reflection that occurred as my hand fell onto the clock for a second time, I made a journey. As the memory of a time when he did not exist entered my mind, I journeyed out of the head and into the heart in order to remember a time without him, and remember a feeling devoid of all worry; it is a feeling that is worth holding onto. It has the potential of being a powerful weapon, and I look forward with great anticipation to using it against him.

I hope that as I go through my morning routine, he notices the determination in my eyes. I want him to know his end is coming. I want it to see the train coming from miles away before it crushes him.

He follows me downstairs where I sit with my mother for breakfast. She knows that he is there too, always. He has a name; OCD is what she calls him. She asks me if I would get something for her out of the basement that she needs for school, and I tremble. I sat down at this table with confidence, but walking into his lair is suicide. I stand up, unbelieving of what I am doing, and walk slowly toward the door leading to the basement. The cold steel once again pressed against my head. I know I will not do this. I will make up an excuse that she will see through, and kindly put up with. He is closer now, closer than ever to placing my life on a track that only knows downhill. Closing my eyes, my hand reaches up and grasps the freezing lock, and I turn it. After a snap, I open my eyes. His presence seems to have faded. I look to my right, and to my dismay, there he is. Strange, however, is that he is a more than ten feet away, and his expression is one of confusion. Next, I open the door, and in less than a second he is out the window, freezing in the cold winter morning. The feeling is back, the one I found again, but this time it is real. I look down the stairs to the basement, and wonder how long this will last.

Trust Us...We're the FBI

BENJAMIN SHIMP

Ben is a junior majoring in criminal justice. This paper was written as part of a criminal justice course he took in Fall 2007 under the instruction of Prof. Richard Wright. At this point in his academic career, he is still deciding on a career path but enjoys the study of American civil liberties.

On September 11, 2001, the United States of America was attacked by terrorist operatives causing one of the worst acts of terrorism known to date. In an effort to prevent these types of occurrences from happening in our country, the Uniting and Strengthening of America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT) Act was passed by Congress in October of 2001. Since then many wiretap and surveillance programs have been put into place, and many older provisions such as the National Security Letter have gained strength. However, along with increased safety efforts many liberties and freedoms afforded to Americans have been restricted and compromised as a result.

According to the Federal Bureau of Investigation (FBI), a National Security Letter (NSL) is a letter requesting "...information from a third party that is issued by the FBI or by other government agencies with authority to conduct national security investigations" (Federal Bureau of Investigation [FBI], n.d.). The authority of the NSL is provided by five provisions of the United States Code. First, the Right to Financial Privacy Act, 12 U.S.C. § 3414(a)(5), allows NSLs to obtain financial institution customer records (FBI, n.d.). Second, the Fair Credit Reporting Act, 15 U.S.C. § 1681u(a) and (b), permits disclosure on a list of financial institution identities and consumer identifying information from a credit reporting company (FBI, n.d.). Third, amendments to the Fair Credit Reporting Act, 15 U.S.C. § 1681v, (under the USA PATRIOT Act) allow disclosure of a full credit report on individuals believed to be involved in an international terrorism case (FBI, n.d.). Fourth, the Electronics Communications Privacy Act, 18 U.S.C. § 2709, provides billing and transactional communication service providers records from telephone companies and internet service providers (FBI, n.d.). And finally, the National Security Act, 50 U.S.C. § 436, obtains financial, consumer, and travel records on certain government employees who have access to classified information (FBI, n.d.). In simple terms, NSLs allow the FBI and other government agencies to gather personal financial and transactional information on residents in the United States.

Historically, NSLs were only used on foreign residents residing in America. Since 9/11 and the subsequent USA PATRIOT Act, President Bush's administration transformed NSLs essentially permitting disclosure of records on *any* United States resident (foreign or domestic) (Gellman, 2005; Johnston & Lipton, 2007).

While this may seem harsh, it has become one of the primary methods of gathering intelligence information to generate possible links to terrorism and terrorist plots. A method such as this proactive approach was scrutinized because of criticisms that the FBI received from being unable to prevent the terrorist attacks in 2001 (Gellman, 2005; Washington Post, 2006). Thus, the Bush administration and the FBI believed the NSL was necessary to obstruct terrorism.

According to the FBI (n.d.), there are only two restrictions or limitations placed on NSLs. First, they are only available for authorized national security investigations (i.e., international terrorism or foreign intelligence/counter-intelligence investigations), not general criminal investigations or domestic terrorism investigations (FBI, n.d.). And second, an NSL can only be used to seek transactional information permitted under the five NSL provisions (FBI, n.d.).

A NSL cannot be used to acquire content within the transaction, only the information that the transaction exists. For example, a NSL cannot be used to authorize eavesdropping on telephone communications or reading the contents of an e-mail. But it allows government agencies to trace the paths of communication between the telephone calls and the e-mails. Essentially, the government can obtain records on how a person makes and spends money, what he/she buys, where he/she travels, what he/she reads on the Internet, who telephones or e-mails him/her at home or at work, etc. The letters have typically been used to trace the financial transactions of military personnel, but have also largely been used to investigate civilian contractors as well (Lichtblau & Mazzetti, 2007).

While the NSL seems like a viable method in catching terrorists and disrupting planned operations, it is not a practical use of resources, and it violates the First and Fourth Amendments of the U.S. Constitution which guarantees citizens rights and freedoms in the United States. Therefore, a citizen, whether foreign or domestic, who is within the United States should not be required to turn over any documentation if he/she is a recipient of a NSL.

Under the Fourth Amendment of the Constitution, "The right of the people to be secured in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched and the persons or things to be seized" (The National Archives, n.d.). The NSL is much like a warrant or subpoena seeking particular information (such as bank statements, telephone records, etc.), but it fails to support the provisions of probable cause. When the NSL was created in 1986 as part of the Electronics Communication Privacy Act, 18 U.S.C. § 2709, it

was utilized as an investigative tool to monitor for terrorism and terrorist activity. However, because of the attack on the World Trade Center in 2001, it is being used more loosely as a fishing tool to acquire as much information as possible on thousands of innocent people simply because they use a specific Internet Service Provider or a certain telephone company (Savage, 2007).

According to the Department of Justice Office of Inspector General (OIG), an underestimated 143,000 NSLs were issued between 2003 and 2005, and annually there has been a fivefold increase in letters since 2001 (Fine, 2007; Smith, 2007). Staggering numbers such as these show 'hunches' rather than probable cause, because it is not probable that there is an excess of 143,000 United States citizens who wish to commit an act of terrorism.

Before the USA PATRIOT Act, an NSL could only be used if it had "specific and articulable facts [(e.g. probable cause)] giving reason to believe that the customer or entity whose records are sought [was] a foreign power or agent of a foreign power" (Fine, 2007). However, after the USA PATRIOT Act this requirement was amended allowing NSLs to obtain information on any person so long as it is *relevant* to a national security investigation (Fine, 2007; Lichtblau & Mazzetti, 2007). The amended requirement is so broad that the FBI can construe practically anything as being a national security investigation, which makes the NSL limitless. Also, after the USA PATRIOT Act, issuance of NSLs was broadened. Previously, NSLs were issued by a limited number of senior FBI Headquarters officials, but new provisions allowed Special Agents in Charge of the FBI's 56 field offices to sign and approve NSLs for use, greatly expanding approval authority (Fine, 2007).

Furthermore, according to its own provisions, the NSL is not "supported by oath or affirmation," rather it is issued by FBI personnel without judicial oversight (The National Archives, n.d.). This could cause significant abuses of power because of inadequate checks and balances. In a report issued on March 28, 2007, Inspector General Glenn Fine testified that during the period from 2003 to 2005 (3 years), out of 143,000 NSLs only 26 violations were found by the FBI.

The violations included "the issuance of NSLs without proper authorization, improper requests under the statutes cited in the NSLs, and unauthorized collection of telephone or Internet e-mail transactional records" (Fine, 2007). Unfortunately, in the OIG's review of only 293 NSLs, 22 violations had not been reported or identified by the FBI (Fine, 2007). This is very unsettling because OIG found 22 violations out of 293 NSLs whereas the

FBI reports 26 violations out of an excess of 143,000 NSLs. But while these violations found by the OIG were believed to have been a result from FBI agents' confusion and unfamiliarity with NSL constraints and not abuse, many, if not all of the violations would not have occurred if judicial oversight existed in approving an NSL.

Additionally, this report found problems under the Fourth Amendment with "exigent letters," or letters that request information immediately because of emergency circumstances. These letters were not part of the NSL authority and were not NSLs. However, they were used to obtain subscriber information from three telephone companies whose impression was that the FBI had NSLs being constructed for them (which was true). The NSL, however, would not arrive until months later because the FBI needed to "cover" itself from being able to explain how intelligence information was obtained legally (Fine, 2007). Often, it was found that these exigent letters were authorized and signed by FBI personnel who were not authorized to sign NSLs, making them non-legal binding documents. And according to OIG, their review found that many times the "exigent letters" were used in non-emergency situations to begin with (Fine, 2007).

Under the First Amendment in our Constitution, people are guaranteed that "Congress shall make no law...abridging the freedom of speech or of the press" (The National Archives, n.d.). Within the provisions of a NSL there is a clause that places a gag order on the letter, prohibiting its recipient from ever speaking about it (18 U.S.C. 2709(c) [2006]). Original provisions to the NSL prohibited its recipients from challenging the letter in court. However, after the USA PATRIOT Improvement and Reauthorization Act of 2005, 18 U.S.C. § 3511 (2006), amendments to judicial review were inserted into the USA PATRIOT Act allowing the United States district courts to "...petition for an order modifying or setting aside the request" (18 U.S.C. § 3511 [2006]). This decision came after the 2004 case of John Doe versus John Ashcroft (Marrero, 2007).

In this particular case, John Doe, an internet service provider, received an NSL to disclose records from customers using their services. After refusing, Doe challenged the letter claiming its unconstitutionality under the gag order provision. In September 2004, Judge Victor Marrero struck down NSL provisions of the USA PATRIOT Act saying that permanent gag orders violated free speech rights protected under the First Amendment. The government appealed the ruling, but Congress amended the NSL provision (through the USA PATRIOT Improvement and Reauthorization Act) before the court could issue a decision (American Civil Liberties Union [ACLU], 2007). Essentially, had Congress not passed the bill, the NSL would probably have been declared unconstitutional, thus prohibiting its use.

However, the new provisions, which allow limited judicial review (only challenging) are still unconstitutional. The NSL still violates the First Amendment by "giving the FBI authority to suppress speech without *prior* judicial review" (ACLU, 2007). While the amended statute allows recipients to challenge gag orders in district court, the NSL provision requires that the courts defer to the FBI's view that secrecy is necessary (ACLU, 2007). But, this defeats the purpose of judicial review and checks and balances if discretion is solely limited to the FBI.

While one can understand the expeditious process and speediness of the NSL as a tool, it should not be utilized if it violates the First and Fourth Amendments. There should be a balance between civil liberties and investigative methods, however, the NSL does not provide an adequate balance and draws supreme power to the Executive branch. Rather, instead of using an NSL perhaps it would be more prudent to use something similar to the original Foreign Intelligence Surveillance Act (FISA), 50 U.S.C. § 1801 (2006), however, maintain the intelligence information that an NSL obtains (i.e., transactional records rather than complete surveillance as the FISA does). This way prior judicial consent would be required in order to lawfully collect data on suspects. Under FISA-like provisions, the courts must find probable cause and minimization requirements to justify surveillance. Moreover, problems with the First Amendment will cease to exist because the FISA requires no gag order for its recipients. Overall, some speediness may be lost, but even more is being lost when companies refuse to hand over information because they believe the request to be unconstitutional.

Thus far, the documents that have been collected through the NSL have not found or established any links to terrorism or terrorist related planning (Lichtblau & Mazzetti, 2007; Gellman, 2006). And on September 6, 2007, the gag order on the NSL was declared unconstitutional under the First Amendment because "it functions as a licensing scheme that does not afford adequate procedural safeguards, and because it is not a sufficiently narrowly tailored restriction on protected speech" (Marrero, 2007). Because the courts determined that the subsection involving the gag order could not be separated from the rest of the statute, the entire NSL provision was declared unconstitutional barring an appeal within 90 days (Marrero, 2007). This does not restrict the FBI from using the NSL within the extra 90 days, however, unless an appeal is filed the decision will uphold the statute as unconstitutional.

While there is no doubt that an appeal will be filed or amendments will be made to the existing NSL statute, one can only hope that new provisions will give American citizens proper civil liberties afforded by the U.S. Constitution. As the battle continues to stop the War on Terrorism, we must not lose sight of maintaining liberty and order by keeping our methods of intelligence gathering fair and constitutional.

Works Consulted

American Civil Liberties Union. (2007, August 15). "Patriot Act Gag Power is Unconstitutional, ACLU Tells Court." Retrieved November 1, 2007, from <http://www.aclu.org/safefree/nationalsecurityletters/31315prs20070815.html>

Federal Bureau of Investigation. n.d. Press Release: National Security Letters. Retrieved November 1, 2007, from http://www.fbi.gov/pressrel/pressrel07/nsl_faqs030907.htm

Fine, G. A. (2007, March 28). *The FBI's use of National Security Letters and Section 215 requests for business records.* Retrieved November 1, 2007, from <http://www.usdoj.gov/oig/testimony/0703b/final.pdf>

Gellman, B. (2005, November 6). "The FBI's Secret Scrutiny." *The Washington Post*, A01. Retrieved November 1, 2007, from <http://www.washingtonpost.com/wp-dyn/content/article/2005/11/05/AR2005110501366.html>

Johnston, D. & Lipton, E. (2007, March 9). "Justice Department says F.B.I. misused Patriot Act." *The New York Times*. Retrieved November 10, 2007, from <http://www.nytimes.com/2007/03/09/washington/09cnd-fbi.html>

Lichtblau, E. & Mazzetti, M. (2007, January 14). "Military Expands Intelligence Role in U.S." *The New York Times*. Retrieved November 1, 2007, from <http://www.nytimes.com/2007/01/14/washington/14spy.html>

Marerro, V. (2007, September 7). "Opinion Decision and Order" (04 Civ. 2614 [vm]). Retrieved November 11, 2007, from <http://www.aclu.org/pdfs/safefree/nslddecision.pdf>

Savage, C. (2007, September 7). "Judge Rules Against FBI Data-gathering Tool." *The Boston Globe*. Retrieved November 2, 2007, from http://www.boston.com/news/nation/washington/articles/2007/09/07/judge_rules_against_fbi_data_gathering_tool/

Smith, J. R. (2007, March 10). "Report details FBI data-collection errors." *The Washington Post*. Retrieved November 10, 2007, from <http://www.washingtonpost.com/wp-dyn/content/article/2007/03/09/AR2007030902353.html>

The National Archives. (n.d.). "The Bill of Rights: A transcription." Retrieved November 11, 2007, from http://www.archives.gov/national-archives-experience/charters/bill_of_rights_transcript.html

Washington Post. (2006, March 15). "Patriot Act primer." *The Washington Post*. Retrieved November 10, 2007, from www.washingtonpost.com/wp-dyn/content/article/2005/11/03/AR2005110301390.html

Fish to Fry

AIMEE ROCHON

Aimee Rochon graduated from Bridgewater State College in May 2007 with a BA in English. Aimee would like to thank Dr. Michelle Cox for her encouragement.

"The fish has several scars—like pierced ear marks—along its wide bottom lip."

—Noah Adams

Many of us don't want to know the truth about our family's past. We tend to see the best in our family members; after all, if you don't have your family, who do you have? I like to imagine my family like a river, somewhat like Noah Adams did in his memoir, *Far Appalachia*. While in search of his family history and stories, Adams takes the reader on a journey through his home region and on the New River. His family history feels like a secret, something mysterious and slightly out of reach, lingering in the water of the river, waiting to be discovered. Like Adams' river, the surface of my family's river is deceptive. From the banks, our river looks clean and calm, unaffected and preserved. Yet step inside and let the water run over you and you will notice the chaos that lives just underneath the surface of our reflective and shimmering exterior.

Yes, our river is raging underneath, forcing its way through a cold mountain valley, half frozen, half melted, each sheet of ice a family chapter, broken off and released from the main story. I like to think of my family members as the rocks below the river's surface. Sometimes they break beyond the water line and sometimes they don't. These rocks guide my journey, create little dips and bumps along my path; guide me as I flow past, affecting me both momentarily and ultimately. What I do not realize yet is that these rocks and sheets of ice will always be with me, because they too, are a part of me, a part of our river.

Just like the river, my family has secrets. We have stories that we don't like to talk about. These secret stories are the fish that swim far below the surface, popping up, if only for a moment, before plunging back to the safety of the dark water. Like the fish that needs water, these stories need keepers. As I get older I realize that I have never been a keeper, have never seen below the surface of my family's river. But I hear these stories now; my family does not withhold them any longer. I am becoming a keeper, one small secret at a time.

But I don't want to hear stories from Mom about Dad's plans to kidnap my sister and me when we were babies. I don't want to hear how he was going to take us to Canada with some lady named Cathy. I don't want to find pictures of

her in our family photo albums. I don't want to know that she spent every Christmas with my family and that my Nana treated her like a daughter, yet she still tried to take us away from our family when we were just babies. I don't want to find pictures of her reaching out to me, a two-year old, and the look of pain and sadness on my small, chubby face. I don't want to think that my family was being deceived, when they were just trying to help her out. And I don't want to see the serious reaction on Nana's face when Mom tells me about the failed kidnapping heist, when I look to her for a bit of sanity, begging her with my eyes to signal this is not true, like my Mom is crazy and making all this up. But Nana always did like her fish kept deep down in our river. I don't want to hear my sister say that she already knew this and that was why she went to counseling a few years ago. I guess her fish are rising to the surface of our river too. I want to be a releaser. I don't want to be a keeper. I don't want Mom to laugh when I ask how they foiled the plan of the kidnapping, saying casually, "Well, we just didn't let them in the house." I don't want to hear myself laugh in reaction to this crazy story. I don't want to feel myself rationalizing that Dad must have really loved us if he wanted to take us away, because in reality, I'm sure it was just for ransom money, to use to buy more booze, his first true love.

*"Secrets are things we give to others to keep for us."
—Henry Wadsworth Longfellow*

Dad loved drinking so much that for a long time, we never got to see him. I never minded though, I was always a Momma's girl. Eventually there came a time again when Missie and I were allowed to see Dad. You see, Dad had exchanged the addiction of alcohol for the addiction of Alcoholics Anonymous. No longer did we see him with a beer bottle in his hand. Now he was all about getting those little medallions, a small token of his sobriety. The best part of Dad's sobriety was the AA dances he took us to every other Saturday night. We liked getting dressed up and seeing all our new friends there. Missie and I learned to love these dances, along with all the other sons and daughters of alcoholics, even if the rooms were smoky and our eyes burned. Besides, they had lots of junk food at these parties, so we just basked in all the free orange soda we could drink out of those short, white, Styrofoam cups, our names carved into the sides with a fingernail. The music was fun so we danced, we laughed, and we played. We seemed to get comfort out of this routine: the songs, the kids, and the smoky rooms never changed. We were seven and eight and this was our custom. It's just like girl scouts or CCD I told myself, except we never lasted so long there, and instead of friendship badges and first communion, we got orange soda and chocolate covered donuts, fleeting moments of sugar rushes and break-dancing. I'd rather remember those dances than hear the stories of Dad taking Missie and me to a bar with him, only we had to stay in the car because we weren't twenty-one. No, we were just

two and one. But people tell me these stories now that I am a grownup. They want me to be a keeper for them. But I certainly don't want to hear how Dad pushed Mom down a flight of stairs while she was holding me, an infant, in her arms.

Release. Release. Release.

"The first river you paddle runs through the rest of your life. It bubbles up in pools and eddies to remind you who you are."—Lynn Noel

Some will say, "You kids are so lucky that you were too young to remember those things." But I never said that I wanted to be a keeper. I want to be a releaser. I want to take that slippery story, that mangled up mackerel and throw it back. Get rid of it, make it disappear. Like the friendly fisherman who throws his catch of the day back into the water, I too want nothing to do with the keeper's chore. These fish are scarred. Each time they are caught and brought up to the surface they reveal a fresh wound. Just like Dad's head. Opened up to fit room for a shunt that drains water from his brain. Yes, Dad literally has water on his brain. Maybe that is why he is so mad. You can practically see this tube running over the top of his balding head. I don't even ask if it has anything to do with his bipolar diagnosis. I don't want to know anymore. I don't want hear the stories anymore. I don't want to be a keeper. I hate to hear that Dad has jumped off a highway overpass or is harassing the cousins again. I don't want to check my voicemail and hear him begging me for twenty dollars so he can buy cigarettes and coffee.

Like a fisherman with his hook and pole, I too, have tools on my side. I call them distance and denial. If I don't answer his calls, then I don't have to talk to him. I don't have to deal with all his craziness, his pain pill addiction, and obsessive compulsive behavior. I use these tools frequently so I can just keep flowing right over these fish, these secret stories. I have places to go and sad secrets to ignore. But I understand now why everyone throws back the mackerel. No one wants to look at such an ugly fish. No one really wants to know the depths and complexities of their family secrets.

"Sometimes, if you stand on the bottom rail of a bridge and lean over to watch the river slipping slowly away beneath you, you will suddenly know everything there is to be known."—A.A. Milne

But I don't want to remember when Mom dated Mark and they built a house in Plymouth. Missie and I were living with Nana, as always, and didn't really want to leave the comfort and security of her home. At the same time, we wanted to live with our Mom like normal kids do, but not in Plymouth, not so far away from our friends, and certainly not the summer before eighth grade, the absolute worst time to move a kid. But Nana said we had to go and live with them. I don't want to remember her saying: "Your mother has a house now . . . it's time she had her girls." I don't want to find old pictures of my sister standing in her unfinished bedroom that was right across from my unfinished bedroom. Yes, we each had our own room, something we never had before, but we never imagined they would be like this. I don't want to remember that we had no finished floors, no drywall, no heat, no nothing in our bedrooms. We had so many plans for those rooms. We liked to sit up late at night and talk about how we were going to decorate our rooms, what colors we would use, and what comforters we would have on our beds. We looked through catalogs and folded down pictures of rooms we liked. I remember wanting to put a window on the shared wall between Missie's bedroom and my own. I figured it wouldn't be so hard since the walls were still unfinished. And Mom always had a flair for interior design, so she would sit with us and suggest ideas for our rooms. I always liked her ideas, but I never got to see them in the physical world. They never amounted to anything. Just like her relationship with Mark.

I don't want to remember that feeling of not being wanted or welcome. And I definitely don't want to remember the sound of his voice as he yelled at us, red faced and angry about anything, and Mom's voice as she made excuses for him. I don't want to remember how rude he was to Mom, how he tore down her self esteem, made her feel like she was nothing. I hate that memory, that feeling that has stayed with me that Mom would always choose her boyfriend over her girls, no matter how terrible he treated her. We were never a package deal when it came to Mom and her boyfriends, no matter what she said. They never wanted to be a family with us. They just wanted to dominate and control Mom, make themselves feel better about their shortcomings by caging my beautiful mother and clipping her wings.

I don't want to remember how tough I thought I was, a hidden steak knife in my dresser drawer just in case. I don't want to remember how happy I was each time Mom and Mark fought and Mom said we were really leaving this time. I don't want to remember that feeling of joy and satisfaction when I believed her that she was really taking us back to safety, back to Nana's house, where we had tea parties and dinner every night at six. And I don't want to remember that feeling of sheer and utter disappointment in her when she always took him back. I hated those times and I hated Mom for it. I hate that I remember thinking that Mom

would endure anything if it meant she had a home of her own. Even if that home wasn't in her name and her kid's bedrooms were unfinished.

Release. Release. Release.

I don't want to remember Mom's winter rental on G Street in Hull when I was in the fifth grade. I don't want to remember her friends that stayed with us and all their fighting and alcohol abuse. I don't want to remember the time that the fighting got so bad that everything in the house was broken, huge mirrors shattered to pieces all over the living room floor, increasing our bad luck for another seven years. I don't want to remember that feeling of embarrassment and shame when the soccer coach came by to drop off my trophy and saw all the wine bottles, with candlesticks in them that were strewn all over the front porch. Where clam shells filled with cigarette butts welcomed any visitors we may have had. I don't want to remember that cottage and its bare refrigerator or the eyes growing on the potatoes on the bottom shelf of our otherwise empty pantry. I was always scared to open that door because each time I did, the eyes seemed to have grown longer and longer. They were so long that no one wanted to touch them anymore, even just to throw them away, to get rid of them. So there they sat, a big sack of potatoes and eyes, creeping slowly out of the dark pantry and into the light of the small kitchen. We had a box of crackers and cheese in there too. Those little, neat, pre-made sandwiches, but the cheese tasted so funny that we hated to eat them. But it was that or the potatoes, so we ate, small fingers pinching small noses.

That sack of potatoes and box of crackers were everything we didn't want to see, feel, and taste. Everything we tried to hide from ourselves and each other; but no matter what we did, how we tried to close the door and cover them up, they remained there, staring us in the face, reminding us that our secrets never leave us, and that our shame is always just an overgrown produce item away. How long they sat there at the bottom, just like the fish when sleeping. Even when you don't see them, you know they are still there, breathing and growing, waiting for that next moment to pop out of the water or spill out of their sack and onto the floor of the pantry.

I don't want to remember that summer when Nana got into a fight with Mom. We were living with Nana at the time, but not for much longer. It seems like we were always in and out of Nana's house in Braintree. It was August 23, 1987. My tenth birthday. Nana yelled. Mom stormed out. I was sitting on Nana's front, concrete steps, trying not to listen; fingers tracing the iron railing, the swirls and knots and dead ends. Trying to still enjoy my birthday. My friend, a neighbor, said she thought she heard her Mom calling her and left. I don't want to remember that feeling of uncertainty,

of vulnerability. Of having no idea what was about to happen and knowing that I had no control. It was my birthday. Didn't they care? Couldn't this have waited until tomorrow? I remember hoping that Mom would take me with her. I wanted to be on her team. If she was mad at Nana then so was I. I remember wanting to convey that sense of teamwork and support to her, but I was too young, and didn't know how. Mom finally did take me with her that day she left, the day *we* left. I remember feeling that she and I were against the world. I remember being strong for Mom because she just didn't have it in her anymore. I remember Mom apologizing to me for not being a better mom, for not having a home for Missie and I. She was crying but I wasn't. I had to show her that I was tough. We could make it on our own, just her, me, and Missie. She said that we were going to be a real family, just us three. No boyfriends, no Grandparents, just us three girls. The way it was supposed to be.

But instead, Mom took me to see my Uncle Paul and Auntie Johanna who were camping on Curlew Pond in Plymouth for the weekend. They had a present for me in their tent, a Bon Jovi poster rolled up and hiding inside a sleeping bag. We stayed long enough for the fight between Mom and Nana to blow over. Long enough for me to fantasize that all those things Mom told me were really going to happen, like being a family together and having a place of our own, with no boyfriends to ruin our fun, and no Grandparents to tell us what to do. But she eventually took me back to Nana's and carried on with the rest of her life. I don't want to remember that feeling of being so happy, so high with the thought of having my childhood dreams come true, and then having them crash and burn just after my tenth birthday. Yes, before I knew it, I was back on those stairs, tracing the iron railing with my fingers, like nothing had even happened. Like no promises had ever been made.

"Rivers represent constant rebirth. The water flows in, forever new, yet forever the same; they complete a journey from beginning to end, and then they embark on the journey again."—Tim Palmer

I realize now that I must be a keeper and not a releaser. I must catch these secret stories, these sneaky little fish and let the breath run out of them. I need to fry these fish, grill their guts out. Finally boil those glaring potatoes and mash them up good. These fish need to feel the pain that I feel, the stab of the hook and the heat of the grill. Then our river will be clear. Then my nieces and nephews, my future children and grandchildren can swim in our river without the fear of a slimy fish nipping at their ankles and toes.

I realize that these memories and secrets of my family will never really go anywhere. They remain here with me, as they are with my sister, mother, father, grandmother, and grandfather. Instead of recalling these sad stories, I would rather remember the three-legged races in my Nana's front yard on my seventh birthday, my purple and white striped shirt that matched the colors on my Snoopy cake that Mom baked and decorated just for me. I'd rather reminisce about finding sand dollars on the beach while camping, learning how to shuffle cards the grown up way, or the sweet dreams I had while sleeping in my real bedroom at Nana's, the one with carpet and curtains. Maybe knowing the truth will make me stronger. Maybe not. But this is my family and these are our stories. That will never change. Our river will keep on flowing.

"The river has taught me to listen; you will learn from it, too. The river knows everything; one can learn everything from it. You have already learned from the river that it is good to strive downwards, to sink, to seek the depths."—Herman Hesse

1st & 2nd Year Work

THE UNDERGRADUATE REVIEW

VOL. IV

A Mother's Courage

JEREMY BRAGG

Jeremy is a sophomore at Bridgewater State College. He wrote this piece in his English 101 class during his freshman year for Professor Jane Rando.

I stare in disbelief: “No. No. This can’t be happening. It’s all a dream. Close your eyes; it will go away,” my subconscious quickly commands. I turn away from it all, not ever wanting to see this ungodly sight again, but it is everywhere, playing like a movie in my head. “Turn it off! Stop! Please stop!” I hear myself scream. The show continues to roll, flickering now just as the old movies did, but now the sound is growing louder, deafening. I hear myself let out another shriek of terror, and I wake. “Hey man, do you wanna sleep over tonight?” Tom asked excitedly.

“Yea, that sounds great! I’ll take the bus to your house and call my parents when they get home,” I said. I got my schoolbooks and bag and ran off to my next class as the bell began to ring. “I can’t wait” I thought to myself as I took a seat, “This is going to be the best sleepover ever.” The first day of school ended with a sense of accomplishment and a certain release of anxiety. I called my mother as soon as I knew she would be home, and she agreed to let me sleep over at the Fisher’s home.

Just as I had predicted, the night was filled with amazing games, including army and hide and seek. We played with a bunch of the neighborhood kids and had a blast. Afterwards we sat down for the best type of supper: pizza, of course, just the thing any kid would want at a sleepover. We put in a newly released movie we had just gotten from Blockbuster, and we began to settle in for the night. The clock ticked and tocked until the midnight bell rang. We grew tired and went into Tom’s room to settle down. Tom and I shifted the pillows, blankets, and comforter accordingly to make what I would call a bed but many would call a messy pile of stuff. I don’t remember much after that; we fell asleep quickly from our exhausting day.

I began to quiver from a cool draft that had begun to flow in. “A window must be open,” I thought to myself, but I could see no motion from the curtains. The frigid air began to slide down my spine like a dribble of cold molasses. My mind slowly became numb, and my fingers felt brittle. I looked around hoping to find the source of this strange cold front, but again I found nothing but a motionless room with no answers. I tucked under the covers of my makeshift bed and tried to warm up. My throat dried up and began to ache. “I hope I’m not getting sick,” I told myself. I jumped up, still shaking, and headed toward the bathroom. Suddenly, a loud bang startled me. Curiously, I crept toward the noise, hoping

it was just nothing but a fallen bag or book. A nervous chill ran down my back. I could feel my face begin to burn as if I were embarrassed. Then I heard a crack, the same sound you would hear when a cowboy's whip make as he hit his horse. I slid against the wall waiting in despair for someone to come help me. I heard something metal drop and cling on the ground.

My heart began to beat rapidly. I tried to slide over to the kitchen door but my legs refused to move. I managed to reclaim control over my legs and headed for the door. With each and every step I took, my mind cautioned me to take two back. Just as any kid would do, I threw caution to the wind, and, reaching the kitchen door, I peered through the small crack in the door to see two silhouettes. One immensely taller than the other.

The mumbling turned clearer as if someone had turned the antenna to fix the static on a TV. I remained still. My breathing grew heavier. I tried to make out the two figures but had no luck. "Where is it? Show me!" a deep, masculine voice commanded. "It's in the living room," a quivering feminine voice replied, "that room." She pointed toward me, scared and trembling. A lump built up in my throat; I could hardly breathe. I had to drag myself across the room for my legs had again been lost to the fear. I managed to get behind a chair in the corner of the room, as if it were a game of hide and seek. A giant charged through the door and surveyed the room. "There it is," he whispered under his breath as he spotted the large television. I glanced over to the kitchen door to see the shadow of a woman on the phone.

"What is he doing?" I wondered, as the man motioned with his hands. He looked like he was commanding an army. A figure appeared from the darkness outside. The giant opened up the window and began whispering to the man outside. "I've gotta do something" my mind decided, but was denied access to my brain in order to move my body. My limbs were more numb now then, ever as if I had been stuck out in the snow too long with nothing on but shorts and a t-shirt. Mrs. Fisher slowly peeked into the living room with the phone by her ear; the giant turned around at that exact moment. The man darted over and slapped her. My mind went into overdrive; I wanted to help Mrs. Fisher but my body had already lost the war to fear. I remained still and silent.

"So what, you think you can just call the cops and get me arrested?" The enormous man leaned over Mrs. Fisher's frail body. "I'm gonna teach you a lesson," he said angrily as he started to hit her. My eyes focused on the large man as he continued to beat her until they began to water and burn. The dark figure outside called in to the giant as the sound of sirens came into earshot. The man got off Mrs. Fisher and rushed to the window. I couldn't believe what I saw next. She got up and chased him down, jumping on his back and refusing to let go. He swung her with all his might and

slammed her into the wall. I saw the blood pour from her head onto the wooden floor, where she lay unconscious. I could no longer hear the sound of sirens, but I could see lights flashing all around the house. It was like a scene from a science fiction movie when aliens come to abduct someone. Red. Blue. Red. Blue. Red. Blue. My senses succumbed to the darkness.

My recollection of what happened next is scant. A familiar face awakened me. "You're home now. Are you okay?" my mother asked. "Home." I wondered if it was all a dream. I was safe now from that other world of despair; it was only a nightmare. "I'm fine; it was only a dream," I said with as much sincerity as my vocal chords would give.

"No son. It wasn't just a dream," my father claimed. At once I was bombarded with questions by my parents about the night. "I'm fine," I could remember saying repeatedly, as the flashbacks and nightmares consumed my mind. I could so vividly remember Mrs. Fisher's body lying still on the ground covered in a pool of blood. These disturbing scenes had been permanently stamped into my memory.

In Technology We Trust

COURTNEY PARECE

Courtney Parece is a freshman at Bridgewater State College majoring in Psychology. This piece was written for her Writing I class, with support and guidance from her professor Patricia Portanova.

As I step out of Psychology, I quickly snatch my cell phone from my back pocket. While I have been in class for an hour, there is a great possibility that I could have missed a call or received a text message, and it is vitally important that I check to make sure neither of the two have occurred. While walking down three flights of stairs, I text my boyfriend back to tell him that I love him too and that I will see him later. By this point in the year I have mastered texting and walking. It was not easy, but I like challenges. When I reach the bottom of the stairs I search frantically for my tiny black headphones that no doubt have gotten tangled in my notebook in the side pocket of my bag. I step into the Moakley technology building and finally manage to untangle them, plug them into my cell phone, and listen to the catchy tunes of Andrew McMahon. His poetic stanzas of teenage angst and hopeless romanticisms manage to bring me to another world while I make the journey to the Commuter Cafeteria. I order my number one (white, scrambled, and bacon) and wait in line, now being entertained by none other than the band Paramore. After I pay for my food, I find my usual spot, sit down, plug in my computer and log on to Facebook. I see that Brianna has sent me a free gift and Ben has poked me for the umpteenth time, all this I'm doing while listening to my music and reviewing for a test in my last class of the day. When the clock reaches ten of eleven, I pack up my Dell and head to English. There we discuss the impact of technology, and I turn a little red when I realize what it has done to me in just the past hour.

Most people, especially college students, can relate to my story. We have grown up in a world of technology and as a result many of our lives center around it. What people once did manually, we would never even consider unless it was a last resort. People used to go next door to talk to their neighbors about something they were worried about, or ask their spouses for insight when they could not find the answers in themselves. Today, we can call people on our cell phones to chat, we look to Google for the answers to everything whether it is what is causing a sore throat to what Britney wore, or didn't wear, this week. Now, if you have nothing to do there is no reason to get up and move, just plug in the Xbox controller and play basketball with LeBron James.

People across the world no longer value human interaction as we once did, when technology was not everywhere. We have come to depend on machines to do what we could do very easily on our own. These innovations have caused

us to become lazy, but to say that is all they have done is a vast understatement. They have changed us as people in countless ways and for the most part these changes have not proved to be positive ones. While people everywhere are considering technology something that they can't live without because it enables them to feel connected and up to speed with the world around them, they are not considering the possibility that it is really just pulling us farther away from reality, into a world where we are isolated and unable to deal with actuality.

Electronics provide people with fun that is comparatively mediocre to the actual fun they could have if they threw their devices away. Unfortunately, they can't see that because they would rather have to press a few buttons, turn a few mechanisms, and plug something in than actually really get physically involved. People are becoming farther apart from each other and closer to their machines, and not because they need to, but because they want to.

As much as I love being immersed in my technology, the world truly opens up when I don't use my mp3 player or get sucked into my computer, but it also makes me feel like I am missing something that I really need. Control is one of those overwhelming emotions that can be seen as positive or negative, but in this case it is classified as the latter. With all of the electronic devices at our disposal it is completely possible to get caught up in their ability to keep you updated on everything. However, too much control is not good, simply because it is not realistic. In the real world you are not in control of a great deal of things, and when you can check work anywhere on your Blackberry, keep track of friends or enemies on Facebook and MySpace, stay updated with news on your cell phone, and catch the newest trends on your video iPod, you become under the illusion that you have nearly complete control of the world around you (Williams 2). We have grown to depend on these machines to keep our fears of not being in control at bay and that does not seem healthy.

When we use our technological machines we are not only quenching our thirst for control, but we are also unknowingly isolating ourselves. Each day as I walk from one campus building to another with my headphones on I am sending the message to others that I am in my own space, and I am not about to enter theirs. Sometimes it is good to be in your own space but, too often, we forget that there are other people out there, opportunities and important interactions that are necessary to develop one's character (Williams, 1). On the days that I forget my mp3 cell phone, I notice so many things that I take for granted on the other days: animals, sounds, conversations around me. Sometimes I even get involved in conversations myself, even if it is just small talk. The problem is when I put the headphones back on all of those opportunities, conversations, and realizations disappear.

Armstrong Williams, a writer for the *New York Amsterdam News* summed it up perfectly, "When you plug into your iPod in a public place, you are basically telling everyone else that you don't want to interact with them...you want to be isolated and left alone" (Williams, 1). Williams shows the effect that occurs when we use our electronic devices in public. When someone is in a coffee shop and sits next to a customer with their headphones on, they will almost always feel less prompted to talk engage you in a discussion because when the headphones are on, the conversation is off (Williams 1).

I recently read an article written this summer in *Newsweek* about a family who went on a road trip titled, "The Family Road Trip: Strangers in a Minivan." The author, Lisa Segelman expressed how disappointed she was with the road trip because it lacked all of the human interaction and togetherness that she used to experience when her family used to go when she was younger. She knew that the trips wouldn't be exactly the same, but she thought they would be reminiscent. She pictured her kids marveling at the scenery as they drove by, playing license plate games, and singing along to the radio together as a family (Segelman 1). But it was nothing like that; her kids were either listening to their mp3 players or watching a DVD on the portable player, leaving her feeling like she was all alone as she sat in the front seat driving. Even when she tried to strike up fun conversations with the kids, they were too busy with their electronics to notice (Segelman 2). My favorite part was when she talked about how the global positioning systems were the only people talking. Imagine that, a car with a real family inside and the only voices being heard were from "Kelly" and "Robert" the voices inside the machine! At the end of the trip her daughter got tangled in her seat belt and her mom took comfort in the fact that none of the electronic devices that filled the car were able to help her, only a simple pair of scissors (Segelman 2).

The "iSolation effect", as Bruce Weinstein, a writer from *Business Week Online* calls it, is not just limited to music players. We use electronic devices for countless other things that require our constant attention, and, thus, we are only focusing on that one thing. When we text, read business e-mails on our Blackberry, check online to see when our favorite band is touring in the area, or are having a conversation on our cell phone as Weinstein says, "We miss the chance...to make new friendships, renew old ones, or simply say hello to a new stranger" (Weinstein 2). It is something that one can see simply by observing the foot traffic between campuses each day. The kids who talk to each other are most often the ones that don't have an electronic device in sight. If those people can live without their devices for a while it seems unnecessary for others to be attached to theirs twenty-four hours a day, seven days a week (Weinstein 2).

The isolation that has resulted from everything electronic clearly holds the potential to destroy our social relationships. People no longer look outside of their own room or the walls of their house to interact with others. For instance, my sister goes upstairs to her bedroom, shuts her door, and sits in her bed with her laptop on her lap, and the TV right next to her on her nightstand, along with her cell phone. She stays up there for hours and only comes out for food, bathroom breaks, and when she's got something on her mind that Jeeves can't answer. Her family, the people around her, rarely get to talk to her. I can honestly say I have no idea who her friends are, what she watches on TV, or what her current goals are, unless of course I go on her MySpace or Facebook page. It's a sad truth to have to accept, but we are more focused on the virtual world than the actual one we are living in.

In chat rooms you can meet people from Britain, Australia and China. You can even hold business meetings with people from seven different countries, without any one of them being in the room (Freidman 2). Through IM, text messaging, and emailing you can communicate with your cousin in Texas, or your Uncle in Ireland, all while disregarding the person beside you (Klempner 1). The irony is that we are so excited that we can tear down the boundaries of geography that we forget how we lived before those boundaries existed. Now, a time when we looked to the person next to us to chat may seem dated, but it enabled people to build genuine relationships (Freidman 4).

The technology revolution has not only caused human interaction to falter, and placed false empowerment in people, it has also caused a threat to our physical health. Companies are selling these devices requiring our attention, often attention that we can't provide solely because we have other things to accomplish, so we learn to do both. Multi-tasking with electronics is negative from many vantage points; one very dangerous aspect is its effect on us physically. Multi-tasking activities are not always as harmless as most of the people who actually do them think. Driving while on a cell phone is not just a minor thing; *The New England Journal of Medicine* published a study which found that, "Drivers who use a cell phone are four times more likely to be involved in an accident than are drivers who do not" (Weinstein 2). That means that every time you talk on your cell phone while cruising down the highway you are putting yourself, as well as others, in serious danger.

In addition, cell phones aren't the only things that are capable of hurting or potentially killing you. You can add to the list, mp3 players, handheld computers, handheld movie-players, and any other handheld electronic device. When you are on these devices you are forgetting about the cars, trucks, bikes, etc., that you encounter while walking, making it easy for someone to hit you. This year in New York alone, there were two deaths reported

after pedestrians, distracted by their mp3, players were hit by cars (Weinstein 2). New York Senator, Carl Kruger, worried that the death toll would increase from all of the electronics used by the people of New York who walk its streets each day, tried to ban the use of these devices while crossing the streets in New York City and Buffalo (Weinstein 2). I remember seeing the story on the news and thinking "How stupid!"; but, honestly something has to be done when the grasp of technology is killing us, literally. The only problem seems to be that not many people actually see our current technology as unnecessary. They think that their iPod, their laptop, and their cell phone are things that they simply can't live without, because they have grown to depend on them.

E.M. Forster wrote a story in 1909, called *The Machine Stops*. In Forster's science fiction work he described people who had allowed technology to take over their lives. They inhabit the land beneath the world's surface, each person by themselves, and their only real means of communication was through a plate, which we can compare to our modern day webcam. The plates deprived them of real human interaction, and prohibited them from their own independent thought. Because they could not really think to themselves none of them, except for the main character, Kuno, realized that the Machine was slowly taking over their lives. Also, they were no longer in control, even though the machine made it seem like they were. They had buttons to do everything for them so they never had to even move. In the end the machine failed and everyone died because they didn't know what to do, they had depended on the machine for so long they were lost without it. (Forster)

This story is eerily familiar to what is happening in our world right now, especially since it was written nearly a century ago. But Forster's story is more than just a fantastical work of literature; it is a prediction, as well as a warning. The people of the Machine world were slowly immersed in all of these new technologies, which they saw as interesting and harmless, just as we see ours. No one could see what was really going on because they were so distracted by the excitement of all of the new innovations. They thought that the machine was just there to help them, but in the end it hurt them because it failed. Thankfully, we have not reached the point that the people of the Machine world did, but that is not to say we won't. With so many of Forster's predictions having already proven themselves, it would not be fair to deny the chances of his last one coming true.

Technology is now not only venturing into new lands, but potentially dangerous ones. It has come to the point where even the people who are creating devices from it are so blinded by their innovativeness, that they can't predict what might result from them. However, it is not difficult to see what has happened to us up to this point, and that picture is not a pretty one, but that doesn't mean we can't make it one. The world of technology needs to slow down and reposition its focus. We need to get away from the cool mechanisms that we don't really need, and move toward productive goals, not towards an even better iProduct. If we do not do something now, it is frighteningly possible that we could soon see demise similar to the poor souls in Forster's dreadful story.

Works Cited

Forster, E. M. *The Machine Stops*. 1909.

Freidman, Thomas. "It's a Flat World, After All." *International Views*. Ed. Keith Gumery. New York: Pearson Education, Inc., 2007.33-45

Segelman, Lisa. "The Family Road Trip: Strangers in a Minivan." *Newsweek* 2 July 2007: 22.

Weinstein, Bruce. "Ethics and the iPhone." *Business Week Online*. 29 June 2007. *Academic Search Premier*. EBSCOHOST. Bridgewater State College. 30 Oct. 2007. www.businessweek.com/careers/content/jun2007/ca20070628_610017.htm?chan=top+news_top+news+index.

Williams, Armstrong. "Technology Overload." *New York Amsterdam News* 25 May 2006: 13.

Wirth, Michael. "Broadband Convergence: Future Directions and Societal Impacts."

JMM: The International Journal on Media Management 8.1 (2006): 19-28.

Communication & Mass Media Complete. EBSCOHOST. Bridgewater State College. 29 Oct. 2007. search.ebscohost.com/login.aspx?direct=true&db=ufh&AN=20031995&site=ehost-live.

A Joyful Soul: A Case History of a Bridgewater Nursing Home Resident

HEIDI WOOFENDEN

Heidi is a first year undeclared student leaning toward Psychology as a possible major. She wrote this case history as a summation of her ten-week "service learning project" in Honors Introductory Psychology under the mentorship of Dr. Teresa King, and presented it at the 2007 Mid-Year Symposium. The project involved visiting a resident of Bridgewater Nursing Home for an hour every week and reflecting on and applying psychological concepts to each visit in a journal, later to be incorporated into the following piece.

When I stepped into the Bridgewater Nursing Home at 2 o'clock on Monday September 17th I had no idea what was in store for me the next ten weeks. I had no idea that I would befriend and ultimately come to love a spunky, quirky and sweet elderly woman, and not only learn about *her* interesting life and views, but about life in general. And I had no idea that I would miss that weekly hour away from the real world so very much.

Volunteering for an hour a week at the nursing home was part of my service learning project for honors introductory psychology, and in a weekly journal I was required to relate my experience with the psychological concepts we were learning in class. I was expecting to visit a very elderly bedridden man, but upon arrival was informed that he had recently had an operation and was sound asleep, so I was invited to assist in Bingo and seated next to a woman who needed help reading her card. I was worried because I knew for my assignment I needed to talk to a resident, but fortunately, Bingo didn't stop her from talking! She had trouble hearing me at times, which was somewhat disturbing to the others in the room because I had to repeat myself very loudly. Yet it didn't really faze me because everyone there was very pleasant and seemed interested in the new young person in the room. At the end of this first session, I had been reassigned to the woman, and was glad because I had already begun to like her a great deal.

It seems most appropriate to begin with simple biological functioning, because this is what creates the human body and mind, and is always one of the first topics discussed in introductory psychology. It is not, in fact, simple at all, but more complex and awe inspiring than anything material—or even theoretical—the mind could possibly fathom. Each of the four lobes of the brain work to control very different functions, but work together flawlessly. Every second we employ most if not all of the parts of our brain for even the tiniest actions and thoughts, and our limbic system and brainstem, controlling all basic maintenance and automatic functioning, are constantly hard at work. (Meyers, 2007). My resident is no exception to this, but has some obvious failures of certain biological functions. I learned last Sunday at the nursing home's Christmas party that she had suffered a stroke. This was new but unsurprising, because of the nature of her mental failures. Her senses of sight and hearing are failing. This suggests that either her visual cortex contained in the occipital lobe is having trouble

itself, or that the rods and cones in her eyes are failing, or that her optic nerve is having trouble carrying the neural impulses *created* by the rods and cones to the visual cortex for processing. And either her auditory cortex contained in the temporal lobe is failing itself, or it is having trouble receiving signals from the inner ear. (Meyers, 2007). Amazingly—considering that she is 95 years old—all other physical functioning is almost perfectly intact. She walks incredibly well with only the assistance of a cane and has very good coordination. Now, knowing that she has suffered and recovered from a stroke, I admire her all the more.

Her other unfortunate biological weakness is short-term memory. Because she seems to forget everything recent within a couple of minutes, prolonged conversation is very difficult, and I often found us going around in circles of the same questions and stories. She may be having trouble with her hippocampus, the memory center located in the temporal lobe. She often experiences retrieval failures, in which she has encoded and stored the memory, but is unable to quite extract it and put it into words. (Meyers, 2007). This definitely put a barrier between us because we would begin talking about a very interesting topic and I would learn a little bit about her past and her beliefs, but she would soon move on to other things. But I viewed it as an adventure, a challenge: I began to ponder how memories shape us and create our identity, which we carry with us until death, and how the loss of such memory could take this identity away from us. I wondered if this woman would be consistent in her reiteration of the fond memories she shared with me during later visits, and whether her identity and the identities of the loved ones she mentioned would remain exactly the same, seeing as she had already changed them slightly with each retelling. I was curious as to which details she would firmly stand by and which would be altered. I decided at the end of my first visit to make it my goal to extract as much new information about things she had already told me, or even new things, as possible with each successive visit. Her long-term memory seemed reasonably intact, so I firmly believed that she could overcome more and more of her retrieval failure as our visits progressed. This proved to be correct.

It seems suitable to first examine my resident against fundamental psychological criteria to give an easily understandable initial picture of her character. The Big 5 Personality Test measures *openness*, *extroversion*, *agreeableness*, *conscientiousness* and *neuroticism* (mental stability) (McCrae & Costa, 1986). Each trait is very apparent in her personality, so she would most likely score high on all of them if taking the test. She always listened to me intently (when she could hear!) and considered what I said with an open mind. She was also very open about her own experiences and opinions, perhaps a bit *too* open at times! She is known for telling it like it is, sparing no curse words, sexual references and the like. I guess when you're elderly and in a

nursing home, you tend not to care what others think of you. But I love her even more for it. Unfortunately her hearing loss created a disconnect between us because I was never exactly sure how much of what I said was actually comprehended. But when we could communicate she was quick and intelligent, and often very creative and wise. Her frequent sagacious statements amazed me, and served as a continual reminder that her mind is indeed still working, and very well at that. She is generally very extroverted because she greatly enjoys others and never hesitates to talk and tell you what's on her mind. She is often the center of attention simply because she talks louder than everyone else—not, I believe, because she really means to be. However, she does not rely solely on outside stimulation, because she cannot always perceive it and has learned to seek internal pleasure when her external senses fail her, a characteristic of an introvert. My resident is empathetic and considerate (i.e. agreeable), never intentionally offending anyone. However, her open and joking nature sometimes causes her to say things that could be perceived as offensive, but no one really minds because of the context. Despite her physical and mental limitations she is conscientious, usually reflecting with detail and precision to the best of her ability. I found that throughout our time together she basically stuck to all of her original stories and the identities of the characters within them, something I had initially doubted. She is extremely emotionally stable—she's always got a smile on her face or is giggling away. This contented mood generally stayed the same while I observed her, with the occasional “I don't know what the hell is going on here!” the expression of her stress and irritation. Apparently, my resident behaves as a normal, well-adjusted individual should.

I made an abundance of additional yet very noteworthy observations about my resident during my visits at the nursing home, and have attempted to analyze them. First and foremost, she was always happy when I saw her, something that intrigues me because of her past and current situations. Being in a nursing home is obviously not an ideal situation, especially when one could *almost* function alone. It saddened me to hear, when asked if she liked Bingo, “I don't care, I do whatever they want me to do.” This was not however, in a gloomy tone, suggesting that she has accepted her dependence and limitations and is trying to make the best of them. She frequently talked about family, but only mentioned a few members: her deceased only son, her nephew (who I assumed was actually a grandnephew based on the fact that he was “graduating college this year to become a great actor”), her niece and her mother. There was never any mention of a partner figure, which was perplexing, and I was never able to learn the reason for her son's death, but comments she made led me to believe it was either as a result of some kind of accident or in a war. She once advised me to live well, because “you never know what could happen...an accident...” And as we were discussing Thanksgiving one week she observed, “This will

be a sad Thanksgiving for many families—so many boys in the war.” However, such somber moments were a great rarity during our time together.

My resident often discussed children and young adults, and the vast differences between them now and in her day. “Back then, kids were kids,” she would often say. They didn’t try to grow up so fast and take all the risks that modern young people do. They didn’t make such impulsive decisions without considering their outcomes. Much of this was a result of the strictness of parents. She often related how “parents were boss, not kids”: children followed the rules and obeyed, no ifs ands or buts. My resident often cooed enviously that my “locks were so beautiful,” saying that her mother forbade her to have long hair but she had always wanted it. It was surprising to learn that parents so firmly controlled their children’s appearance.

Her other favorite topic of discussion was school. She regularly asked me how it was going and what year I was in and made it a point to tell me to “stick with it” every visit, something I at first laughed at because I’m not one to quit school, but a welcome message when I was later feeling stressed and directionless. I often sensed an uncanny understanding between us; she seemed to know what was in my heart and exactly what to say. One day when I was feeling particularly lost, she said, “At your age, you want to do everything. But it’s good that you can’t do everything at once,” implying that the purpose of life would be defeated if everything one wished to do was already accomplished by adulthood. This was incredibly pertinent to me because lately I’ve been struggling with precisely that: there are endless things I would like to explore and experience and I’m unsure how to translate them into a profession. This thoughtful remark, especially coming from someone 77 years older than me, helped me to put my life in perspective and realize that I’m very young and have ample time to do what I love and accomplish my goals. However, I am a firm believer in living for the moment and assuming that time is infinite is false and potentially detrimental. If I die tomorrow, I want to feel that I lived my life to the fullest and that it was not in vain. And so the inner conflict remains. She often related that she had worked in the office at Bridgewater State College and constantly inquired as to the current state and size of it. She said that so many students simply wanted to “raise hell” and cared only about having a good time and escaping reality instead of focusing on what truly matters and maybe even contemplating the complexities and ills of life and our world. I readily agreed, assuring her that I did not belong in that category. I often wondered why she was so interested in school since she hadn’t attended herself, but began to think that this might be precisely the reason. She often talked about how lucky young people—especially girls—are nowadays because we have so many more options and opportunities open to us. She then went on to

say that she thought life must be easier, which I find very untrue! It is no doubt more interesting than choosing between a couple of archetypal careers, but having to choose a single one out of hundreds makes for stress and extreme existential questioning and conflict—at least in my case.

Not only is my resident wise, but as previously mentioned she’s a “wise guy”! She was constantly cracking little jokes or making quirky remarks, which made visits very enjoyable. When asked how her Halloween was, she replied, “Oh, same as usual; I just look in the mirror!” She constantly came up with goofy remarks about herself like this that I didn’t know how to respond to; I usually told her that she was wrong and that she’s looking and doing great, which is the truth. During one visit a professionally-dressed man carrying a brief case walked through the door, and there was a buzz of residents trying to figure out who he was. The general consensus seemed to be that he was a doctor. But being oblivious to this, my resident stated: “If you carry a briefcase you can be anything you want.” I found this statement funny but true. I feel extremely lucky to have visited such an intelligent, insightful and expressive individual.

My resident is obviously in the final stage of Erikson’s (1950) psychosocial development model: late adulthood. She has accepted past tragedies and her current situation and limitations and looks over her life with fond nostalgia. I recall her affirming during one of our final visits that she had had a good life. She has come out on top of this stage’s signature battle of “integrity vs. despair” (Erikson, 1950) and continues to live each day with a rosy outlook. Just before sorrowfully leaving my last visit, she took my hand in hers and said, “Thank you for visiting and putting up with me. I’ve enjoyed our time together.” Tears came to my eyes and I assured her that I had enjoyed it equally as much, would continue to visit her whenever possible, and that the thought of “putting up with her” had never once crossed my mind. I deeply respect and admire this amazing individual. She has shown me firsthand that joy, no matter how seemingly bad one’s past or current circumstances, is a possibility. And to maintain sanity in a largely insane world, this is an important philosophy.

References

.....
Erikson, E.H. (1950). *Childhood and society*. New York, NY: Norton

.....
McCrae, R.R., & Costa, P.T. Jr. (1986) Clinical assessment can benefit from recent advances in personality psychology. *American Psychologist*, 41, 1001-1003.

.....
Meyers, D.G. (2007). *Psychology (8th ed.)*. New York, NY: Worth

Two Worlds

BLAIR GULINELLO

Blair is a double Special Education and Psychology major. After graduation she plans on working with severely autistic children. She wrote this piece in English 101 for Prof. Jane Rando's and presented her paper at the 2007 midyear symposium.

A musty smell fills the air, as the light shines through the tiny windows. The cement floor lined with dirt as the creases in the cement form a straight line from one side of the basement to the other. The atmosphere is silent, which everyone can appreciate if only for a few seconds. The lighting is dim but is just enough when you want a place to sit and think.

This basement to some people is just a place in which boxes sit and dust collects yet to me this place has memories, and is my quiet zone. Within each box is my family history. Each item served in my past. It's a comfort zone you can say. The tiniest collectable is a part of who I am, and if you were to take just one item, I could tell you a story.

My favorite part of this place is seeing the old pictures that lay in a dirty old box next to the water heater. This box has water stains on the sides, and dust balls that make you sneeze when opened. These stains are a symbol of the wear and tear my family has endured. The pictures could sum up my life, positive and negative if I had the time to tell you every aspect of what each picture signified. There's this one picture of my great grandfather and me. I couldn't off been more than three months old, but to me, it's who I am, and it is the stories that my grandma would tell as we sat on the cold cement floor of this little man that meant the world to her. Her humble voice and hand gestures made these stories come to life. His humor much like mine, could always keep a crowd laughing. His content manner always mellowed his wife, and his bright blue eyes and big smile always made you feel warm inside. "He was a man of few words, just like your father, but his impact could silence a crowd, with just the sound of his voice", she would always say. I could sit there for hours, collecting dirt much like the boxes, and not think anything of it.

In the corner of the basement right next to the door that leads to the back yard lies a tupperware bin, full of records. Adjacent to the bin neatly placed is the record player. This ancient form of technology is very familiar to me. My mother still loves to listen to all her records. She has Bonnie Raitt, The Temptations, Bruce Springsteen, Linda Lewis and Diana Ross playing. Even today. I can still sing every one of those songs by heart. Her taste in music has influenced mine greatly. Every now and then I have the urge just to jam to the record player. So I make my way down the shaky old wooden stairs and kneel down and set the record player up, and place a record on and just sing my heart out to songs such as; *She's The One*, *Rock and Roller Coaster*, *Love Hangover*, and *I'm On Fire*. This is my time, and I love it.

Across from the record player in a messy pile, sits all our pool supplies. In no particular order are the tubes, plastic chairs, pool toys, chemicals to clean the pool, and cleaning net. When looking at them I get a bubbly sensation. In early may we start opening our pool. The water fights we have as we hose down the chairs and contests we have with the tubes. Racing each other to see who can blow up the float first and the gratification of knowing you beat your opponent. The rule is whoever wins gets to be the first person to jump in the pool when it's finally set and opened. The anticipation makes your heart race, as the excitement builds up inside. Finally when we get to go for the first swim of the season, it's a rush. The freezing water against your body sends chills up your spine. Lips turn blue as goose bumps cover your body. Finally when your body is ice cold, the opening of the pool is official and it's been a success.

To the left of the staircase is a box labeled movies. Every Disney movie imaginable is within this box. *Bambi*, *Cinderella*, *Pocahontas*, *Dumbo*, *Peter Pan*, *Lady And The Tramp*, *Sleeping Beauty*, *Chicken Little* and *Tarzan* are just a small list compared to what I own. These movies bring me back to my youth. The dress clothes I would wear to be a particular character, the cheap plastic rings that took up half my hand to make believe I was the queen, or the white glass slippers I just had to have to be Cinderella. When seeing them today I can still remember how excited I would get to dress up and be able to watch the movie in my dress clothes, it made me feel important. This was a huge part of my life; it taught me how to dream and gave me goals. Even though they were the silly goals such as wanting to be a princess, it taught me that I could be anyone I wanted.

Items are not all that makes this place significant to me. Rather the games that were played, the memories that were made underneath the pretend forts which were constructed with old blankets and chairs. The battles conquered within these walls. The countless hours spent running back and forth on the dirty floor, to duck from my enemies powerful arrows. Or when my

friends and I would play hide and seek I always would maneuver my way into the smallest space in the basement. As I became acquainted with the daddy long legs that I would usually push out of their homes. The dirt stained on my hands as my heart would race with excitement of being found; which I knew they never would because by six years old I was the best hider in my neighborhood.

By eight years old I knew I wanted to be a teacher. With that I created my own imaginary class room. I would spend most of my day just playing school in this place that most children believed monsters lived. The thrill I would get when I was teaching a lesson or giving out an assignment. The dress clothes I would put on and my mother's high heels that were twice the size of my feet. Yet, I just had to look the role of the teacher; it was what I thrived for. I wanted to change people's lives; I felt invincible. As I grew older I begged my nana to play school with me, I would give her work and she was to do it.

I outgrew the basement slowly. I went down less and less. Yet, this place is very much alive to me still. I still get the butterflies thinking of the times when I was the teacher or the racing heart when I was dodging arrows. The boxes still lie in the same places as they did years ago. Nothing has changed I just grew up. I still am that little girl that lived in her basement, the one who will become a teacher one day. Yet this time, my favorite place will be my classroom. The dodging arrows will be the hardships I will have overcome; the dirty stained box will be me one day. I will have come through life and have my own family pictures in a dirty old box where my children will play.

Marching Band

STEPHANIE SANTOS

Stephanie is a sophomore majoring in English with a minor in secondary education. She plans to pursue a career as a high school English teacher after completing graduate school.

I joined the New Bedford High School Whalers Marching Band my freshman year of high school. It was a totally new experience for me, and though it was challenging at first, I quickly began to love being in band. It got better and easier for me each year, and though high school marching band had always been a good time, my senior year was by far the most intense and the most fun for me.

When drum major tryouts for my senior year came around, I decided that I really wanted to take on the leadership position. There were two other girls trying out, too, and the band director said he wasn't sure if he was going to have one or two drum majors that year. I practiced for hours every day until the day of tryouts--I was determined to become drum major. All three of us were so nervous the night of the tryouts. I was too tense to go first. I felt like I needed a little more time to relax, so I auditioned second. I walked into the band room where the band director interviewed me with questions, such as how I would improve the band, and why I wanted to become drum major. Next, I had to conduct a portion of the field show from the last season. I was shaking. I felt like I had ruined the whole audition. Next, I was asked to conduct the "Star Spangled Banner". When I left the band room, I talked to the girl who had auditioned before me, and she said that she had made a few mistakes, too. We both found comfort in that. That night, the band director and the other judges had a tough decision to make.

One week later, we had band rehearsal, and the director had told us that he would announce the two drum majors at the end. We were excited that he decided on two because it's a little scary going into such a tough position alone. At the end, he could see the anticipation on our faces so he purposely dragged on with mindless announcements. He stared at each of us straight in the eye and chuckled at how anxious we were getting. It felt like the finale of *American Idol* when Ryan Seacrest drags everything on. Then suddenly, he came right out and said, "Your new drum majors are Steph..." I was in shock! I didn't even move for a second. I was in disbelief that I had been chosen.

My band had not won a New England Championship since my freshman year, so I was determined to lead the band to another championship. I kept a close eye on things and tried my best to be a good drum major. I talked to the staff when I had problems, and I told the band that if they ever had a problem with anything I'd be there to help. Everything worked out well and I was praised many times for my ability to control and befriend the band members.

Marching band competition season runs from late September to early November. Even though the season is short, it takes months of practice to make a field show perfect. Weekly rehearsals begin in July and run throughout the summer. These rehearsals are short and serve mainly as a review for summer parades. Some years we actually receive the field show music early, so rehearsals are also used to work on the first song. The last two weeks of August are the most intense. During this time (known as "band camp") we rehearse five to six days a week for at least five hours each day. Rehearsals consist of learning and memorizing three to four songs which form different parts of one show, and memorizing "dots." Dots are spots on the football field that players must get to in order to form a shape with the rest of the band. The marching corresponds to the music. For example, when the music is building in volume and getting to a big hit, the band may march forward in a straight line across the football field towards the audience, and at that hit, the players may halt and snap their heads and instruments up (a horn pop) for dramatic effect. A completed field show lasts about 8-10 minutes.

Bands are separated by size for competitions. There are five divisions, division one consisting of very small bands, and division five consisting of very large bands. This makes judging fairer because a 120-person band looks and sounds very different from a 20-person band.

It is tradition that the seniors throw a surprise party with the theme of the field show on the day of the first competition. It was hard keeping everything secret. The upperclassmen knew there was going to be a party because it was a tradition, but the freshman had no idea. Together, the seniors and I planned a great surprise. Since our field show was music from the musical, *Jesus Christ Superstar*, we dressed up like the characters and decorated accordingly. I wore bell bottoms, a peasant top, and a ribbon around my forehead. We covered an old mural in the band room with six plastic table sheets. Then, we wrote everyone's name on a star and formed a bigger star with the smaller ones. Also, we made a "purple carpet" out of purple table sheets leading to the band room door. We tried to keep the psychedelic seventies theme, so we used purple instead of red. Each band member and staff member got a bag of candy, a balloon, a crown, and a t-shirt bearing the name of our show. Everyone agreed that it was very creative, and it put everyone in the mood to compete.

The first competition of the year gave me flashbacks. I felt like I did at my first competition freshman year. I was so nervous that I would mess something up. This was very different from being on the field because if I made a mistake, the whole band would make mistakes. It was the first time I would be up on the podium in front of a huge crowd of people at a competition. I was nervous that I might mess up our salute to the judges. Luckily, I did it without a problem. Once I got up on the podium, so many thoughts went through my head. What if I forget the counts and conduct in the wrong time? What if I cause a tempo tear? What if I mess up really bad and the judges notice, or worse, what if the band gets confused and the whole show is ruined?! I had butterflies in my stomach, but I cleared my mind and started the show. Halfway through our first song, I became very comfortable, and I started to enjoy it. I got really into it and the band performed fairly well. However, we placed second in our division, and that ruined the night for me.

The next important competition was our home competition. This is always a big deal and it's a lot of fun. This competition draws many more fans than others. We were so excited about performing for our parents and friends. However, it started to rain. We figured it would stop before the show but it didn't. We really didn't want to cancel it. The seniors and I begged our band director not to cancel the show. The competition went on, but not as we would have liked. Many bands decided not to show up because of the weather conditions. As it got closer to our performance time, the rain got worse and many students in the previous bands had slipped and fallen. We had a big decision to make. Did we want to just stand there and play our music or did we want to march and put on a great show? At any other competition, this would've been easy. We would've decided to "park and play" so that no one got hurt, but this was our home show. We couldn't let the audience down. Even despite the rain, the stands were full. We went out there in good spirits, and I had the most fun I had ever had conducting. I was into the music and the band noticed. They were hitting every set perfectly and we sounded amazing. I could hear the audience scream and yell with excitement after every big hit. The audience's delight drove everyone to perform at their best. In the back of my mind, I was hoping that no one would fall. A few slips here and there were obvious, but no one had actually fallen. It was amazing. We had performed to the best of our ability and the audience loved it. As we marched off the field, we had huge smiles on our face. Some of the seniors came off the field crying tears of joy. I felt like crying too, but I couldn't get the smile off of my face. I continued smiling all night. The rain got worse as the night went on, and many bands left. We didn't even have a proper awards ceremony. However, we had won first place, best color guard, best percussion, and best music. We swept everyone in our division and we received the best overall score of the competition.

The day after our home competition, we realized that we had to put our big win behind us and look forward to finals. We won the rest of our competitions and the drum line continued to be undefeated. I began to feel optimistic about finals. I couldn't wait until the big show. Everyone worked so hard, and we finally started having serious rehearsals.

The day of Finals, the band parents threw a party in the band room. This has always been a tradition, too. They did such a wonderful job and everyone loved it. The room was decorated with pictures of everyone, balloons, candy, streamers, and they had put together a slide show of the band throughout the season. Once again, everyone got candy and balloons, but the seniors got an extra treat. The parents had blown up pictures of our heads and taped them to a hanger, and then they hung tie-die shirts on the hanger and placed marching shoes underneath. They formed little people. They were complete with psychedelic glasses, a head band, and a peace sign necklace. This let us relax a little bit and have some fun before we set off for the competition in Quincy.

Once there, everyone put their game face on. We were determined to win. Everyone worked together, we had pep talks, and we did group activities to get our minds set on teamwork. Without teamwork, it would be impossible to win. I went to every single person in the band and wished them good luck. I had butterflies in my stomach again. I didn't think I could bear to lose another championship.

We marched onto the field in two single file lines grasping hands. Everyone had a death grip on their partner's hand. Once I gave the signal, the band got into formation. I marched to the back of the field and conducted warm ups. The sound was warm and perfectly in tune. Once I gave the signal to turn around, the band snapped into position perfectly. I walked back up to the front and faced the band. As I was waiting for the judge to announce us, I looked everyone in the eye one more time. I could see the concentration and determination in their eyes. I knew they would put their heart and soul into this performance. The judge announced us, the other drum major and I saluted, and the audience burst into cheers and applause. New Bedford is known for its excellence, so we have many fans despite our two-year losing streak. Even so, we could still tell where our parents were seated; they went crazy!

I stepped up onto the podium and started the show. The band was concentrating so hard, and I could tell they were having fun too. We performed even better than we did at our home show. It was amazing. I hadn't felt that good about a performance since the last time we had won. Once again, I felt like I was a part of the music and I was swept away in how amazing we looked and sounded. The last big hit was tremendous. I didn't know

we could play so loud and still sound good! During that hit, it was obvious that everyone put every last bit of energy into the performance. It was especially noticeable in the drum line. One of the snare players even jumped as he played his last note. I could see the enthusiasm in everyone's eyes. I had the chills at the end of the show. As we marched off the field and passed the audience in review, I saluted the judges with a big smile. At the end of the track, our band director and staff members were dancing in excitement. Once we got off the field, we burst into laughter and excitement.

Everyone was extremely anxious to find out who had won. The bands sat on the track, and the drum majors and color guard captains stood on the field. I clasped hands with the other drum major and one of our color guard captains. Everyone was so nervous. The band was sitting right in front of us on the track. They were holding hands, too. When they got to our division, the anticipation was getting to us. We just had to know who had won! Everyone's eyes were closed tightly, and I could see everyone crossing their fingers. It was extremely difficult for me to stand and look professional while they announced the smaller awards. We won best percussion and best color guard. I got worried when we found out that our rival had won best music.

The announcer started at the bottom and worked his way up to third place. You could hear my band's sighs of relief after each place was called. When they said another band had won third place, everyone relaxed just for a second. Then, the big moment came. There were two bands left--our rival and us. The announcer procrastinated a bit, and then he said the other band's name! I immediately smiled and swallowed my urge to celebrate. It would have been rude to show our excitement before they announced us. The color guard captain had squeezed my hand so tight at the sound of the other band's name. My band shifted in preparation to jump up and celebrate. Then the announcer said, "...and in first place, with a gold medal and a score of 94.0, that's nine four point zero, the New England Scholastic Band Association's 2005 champion is the New Bedford High School Whalers Marching Band!" I got the chills again and everyone jumped and screamed. I couldn't believe my ears. The stadium erupted in cheers. We had finally won!

As soon as the ceremony was over, the band got up and tackled me in excitement. Everyone wanted to see the three-foot trophy I had had the honor of collecting. We marched in excitement with the trophy held high in the air all the way to the bus. We sang "We Are the Champions" the whole way there.

The bus ride home was so much fun. Once we got off the highway, we had police escorts all the way to the school. Along the route, fans beeped their horns and yelled out their windows.

All of this was going on at one o'clock in the morning! It was a blast. The school parking lot was packed with fans and we were greeted with beeping horns and excited parents. It was the most exciting bus ride since our last big win three years ago.

Being in marching band taught me a lot. I grew up in so many ways. I finally learned to be more outspoken and not so shy. I'm more confident in everything I do because of my drum major experience. Before being drum major, whenever leadership positions came my way, I never went for them because I was afraid of failure. There were plenty of times when I "failed" as drum major, but I always found a way to fix the problem. Because of this, I'm not afraid to fail anymore--nobody's perfect. I've made life-long friends with many of the students in my band, and marching band fulfilled my competitive spirit more than sports ever had. Even though I've graduated, I still attend many competitions, and I still feel like I am a part of the band. I wouldn't be surprised if I become a staff member in the near future.

How to Write an Editorial

GARY LOWELL

Gary is a sophomore majoring in Criminal Justice. This paper was written in his English 102 class taught by Dr. Kathryn Evans

Have you ever read an editorial? If you have, you have probably noticed how different they are from one writer to another. It can be very difficult to know what aspects of editorial writing you should include in your own editorial and which ones you shouldn't; if you know what you should include in an editorial then you will be able to make your argument(s) more convincing. Since being able to write a good editorial can be a very invaluable tool in expressing your opinion to the world, it is essential to first know what you should include in an editorial, thus making your argument more convincing to the reader. The purpose of this paper is to better explain what makes a good editorial, and hopefully make it easier for you to put your opinions into words and express them to the world. To succeed in editorial writing, you will want to use the correct structure, achieve a good balance between facts and opinion, provide reliable evidence to support your opinion, and use your persuasion technique(s) effectively.

Before you can write an editorial you must first know what one is. An editorial is a piece of writing in which the author gives facts to the reader, and then goes on to provide an opinion. This is followed by the author giving reasons as to why he/she believes said opinion. There are two main reasons why people write editorials: to get an opinion that is not widely known into public view, or to try to persuade the reader into believing the author's opinion (Abreu, personal communication, April 9, 2006).

Now that you know what an editorial is, the traditional structure can be discussed; the first thing you want to make sure you have is the correct structure. The correct structure of an editorial is to first give the news event that you will be talking about (McDougall p.60). This is one of the most important things in an editorial, considering that the author wants his/her reader to understand the principles behind his/her opinion. Therefore, the beginning of your editorial should have no opinion in it; it should just be facts. The editorial "Making Democracy Credible," an anonymously written editorial from the *New York Times*, starts out with "Time is growing short to head off more embarrassing voter machine scandals" ("Making Democracy Credible"). The author of this editorial makes a misstep by expressing an opinion before fact: "embarrassing voter machine scandals" ("Making Democracy Credible"). This does not allow the reader time to take in the facts, which results in a credibility gap between writer and reader. In contrast to the previous example, Adam Cohen, author

of “What W. B. Yeats’s ‘Second Coming’ Really Says about the Iraq War” lets the reader know the facts before expressing his opinion. He starts by saying “The Brookings Institute...just released a report on the Iraq War...Jim McDermott...took the House floor...to demand that President Bush present a plan for Iraq” (Cohen). Cohen does an effective job here of letting the reader know what the facts are in his argument before letting the reader know his opinion. This is essential for the reader to believe his claim because if he doesn’t offer facts first, the reader will have no reason to believe him. If he was to just offer his opinion first then the reader would have no reason to trust his credibility, and thus no reason to believe his opinions.

The next thing to do in the traditional structure of an editorial is to give a “clear cut for or against” the topic that you previously outlined (McDougall p.60). This is a relatively simple step, since all you have to do is say whether or not you like or dislike the situation that you described. It is important to let the reader know your stance on the subject before you offer reasons for that stance because if you offer the reason first, the reader won’t know what those reasons are supporting. In the editorial “Edwards Gets it Right, by Paul Krugman, Krugman does a good job of letting the reader know his stance on the subject he is talking about, in this case Edwards’ health care plan, before giving reasons why. For example, “I won’t trust presidential candidates on health care unless they provide enough specifics to show both that they understand the issues, and that they’re willing to face up to hard choices when necessary” (Krugman). Since Krugman let the reader know his stance on the subject before giving evidence to support that stance, it allows the reader to better know what the facts are supporting. Then, because of that, the reader is allowed to make a more educated decision on whether or not he/she agrees with him.

The final step in the correct structure is to provide the reasons that you have for believing your claim (McDougall p.60). This is the most important step, since the reader will not believe your argument if you do not have good reasons to back it up. In the article “The Other Defense Budget,” an anonymously written editorial, the author starts out by making the point that “American troops...deserve every penny requested for them in President Bush’s new \$622 billion Pentagon budget” (“The Other Defense Budget”). Then the author goes on to say “several of the programs [in the budget] can be cancelled outright” (“The Other Defense Budget”). After reading how the author thinks that American troops deserve every penny in the Defense budget, one would expect facts supporting this claim. The evidence that the author gives to support the claim, however, actually contradicts the claim; this creates a credibility gap between the author and the reader. On the other hand, in the article “Edwards Gets It Right,” by Paul Krugman, Krugman provides extensive support for his

claim that John Edwards has a good health care plan. In support of his claim, Krugman says how former Senator John Edwards has set a fine example [in proposing a health care plan]...Mr. Edwards sets out to cover the uninsured with a combination of regulation and financial aid. Right now, many people are uninsured because, insurance companies “game the system to cover only healthy people.” So the Edwards plan imposes “community rating” on insurers, basically requiring them to sell insurance to everyone at the same price...The Edwards plan...offers financial aid to help lower-income families buy insurance. [Edwards’ plan] would “require all American residents to get insurance,” and would require that all employers either provide insurance to their workers or pay a percentage of their payrolls into a government fund used to buy insurance...[In Edwards’ plan] people who don’t get insurance from their employers won’t have to deal individually with insurance companies: they’d purchase insurance through “Health Markets”: government-run bodies negotiating with insurance companies on the public’s behalf (Krugman).

With the level of evidence that Krugman gives to support his claim it is more likely that the reader will believe his claim. If Krugman did not supply so many facts in support of his argument, the reader would not have any reason to believe his argument. This is why, to get the reader to believe the point you are making in your editorial, you must provide reliable evidence in support of your claim.

In addition to providing evidence to support your opinion you want to achieve a good balance between facts and opinion. This is a very important step, since if you do not provide good evidence that supports your opinion, the reader will have no reason to believe your claim(s). As John Hulteng says, an editorial writer may not know “that somewhere along the way [in writing the editorial that he/she]...left a structural weakness that makes the whole [argument] vulnerable” (p.84). Hulteng is making the point here that if the writer of an editorial does not properly balance his/her presentation of fact and opinion that the reader will not trust the argument that the author is making. There are two ways that can happen, the first being that the author provides too much opinion compared to how much fact that he/she gives. The second is that he/she gives too many facts, so that the article is weighed down, with not enough opinion analyzing the facts. In the article “The Comptroller Choice,” an anonymously written editorial, the author does not achieve a balance between opinion and facts; the author provides too much opinion and not enough fact. The author starts off saying

New York’s Legislature appears poised to make a highly irresponsible decision about one of [New York’s] most important offices. Legislatures, who have the authority to pick a replacement for the former comptroller... seem

to be ready to throw aside qualifications – and a selection process they agreed to – and give the job to one of their own. In particular, they seem to be rallying around Thomas DiNapoli...Mr. DiNapoli is a good legislator and – perhaps more important, since Democrats have the controlling votes – a very loyal Democrat. But lawmakers should ask themselves: what are his credentials to be New York's top financial auditor?...And what are his credentials to be the sole trustee of the state's \$145.7 billion pension fund? Once again, two decades in Albany is not enough...All three [other candidates] have vastly more financial managerial experience, and they are not beholden to the Albany power structure ("The Comptroller Choice").

Although the author of this article gives his/her opinion, which is what an editorial is for, the author fails to provide enough facts to support that opinion. This results in the reader not having a good reason to believe the author's opinion. The author of the article "While the Election Watchdog Wanders," on the other hand, makes the mistake of providing too many facts, and not enough opinion. The author says

The presidential campaign's heated fundraising sweepstakes finds lobbyists hurriedly...amassing additional hundreds of thousands from donors to re-stake surviving contenders for the next primary rounds...A partisan standoff blocks the Senate from filling four existing vacancies on the Federal Election Commission...The Republican minority leader...is refusing to allow individual up-or-down majority votes... [He also] threatens a filibuster unless they are voted on as a single package...President Bush refuses to withdraw the von Spakovsky nomination, while the Democrats demand he be considered on his individual record ("While the Election Watchdog Wanders").

The author of this editorial offers almost no opinion in his/her whole piece. This creates a credibility gap between the author and the reader because the reader is reading an editorial to hear the author's opinion on a subject. Since the reader does not receive what they are expecting from the author's article, this makes it difficult for the reader to trust the author's argument. Although facts are necessary in an editorial, they have to be accompanied by an equal amount of opinion. An editorial's purpose is to give the author's opinion on a subject, and if there is no opinion, it ceases to be an editorial.

In addition to balancing facts and opinion, providing reliable evidence is also necessary when writing an effective editorial. However, it can be very difficult to find information to support

your argument. Hillier Kreighbaum tells how reference books, newspapers, and magazines are good sources for support on your argument (p.119). As Brian S. Konradt says, an editorial is only as good as its facts. [If you don't provide facts] you have nothing but a half-formed opinion. Get the back story, understand your argument inside-out. Research every aspect of your topic and cite as many facts as possible; generalities are the death of interesting editorials" (Konradt).

In the article "A Battle over Prisons," an anonymously written editorial, the author does not supply an ample amount of evidence to warrant his/her conclusion. Almost the whole article is him/her saying their opinion; thus the reader isn't given much reason to believe his/her claims. The article "Fudging The Budget," by Stephen Ratner, on the other hand, does a good job of using reliable evidence to support its claim that "private sector accounting rules [should be brought] to the government" (Ratner). Ratner supports this by saying

The 'official' deficit figure for the 2006 fiscal year is just under \$250 billion. But a more accurate calculation would indicate a deficit nearly three times higher, and that is even without including some vast obligations the government owes...These adjustments concentrate on one gap in federal budget bookkeeping: the government's failure to properly account for the cost of pensions for its own workers. Simply incorporating this liability would increase the federal budget by roughly \$200 billion...Unlike a private company, which keeps such overages in its pension fund to cover future benefits, the White House pockets the money and declares the deficit to be smaller...If we adjusted properly for pensions and entitlements, we would leave unaddressed the largest financing gap...by some estimates, \$39 trillion would have to be set aside now to pay for Social Security, Medicare and similar benefits that have already been promised. Just a year ago, those future obligations were \$3 trillion less (Ratner).

In this article Ratner provides ample evidence, which allows the reader to believe his claim. Another thing to think about when writing an editorial is the persuasion technique you use, and there are many different techniques that you can utilize. Ian Abreu, an editorial writer for *The Comment*, told me in an interview that his main persuasion technique is to "appeal to the reader's emotions" (Abreu, personal communication, April 9, 2006). The appeal to

emotion would be using pathos to accomplish the objective of persuading the reader. On the other hand you could also use logos, appeal to logic, or ethos, appeal based on the character of the author (The Art of Rhetoric). An example of an argument based on would be one where the author uses a reader's emotions to try to get his/her point across. An example of using ethos would be when the author uses his/her credentials as support for believing his/her claim. An example of using logos would be when the author attempts to persuade the reader by using logic. You can also use humor as a way to persuade your readers (MacDougall p.83). Humor can be a very effective tool, because, if used effectively the reader will be amused, and at the same time be taking in the point that the author is making. So whatever persuasion technique you decide to use, you need to make sure you use it effectively.

Editorials are very effective tools in shaping public opinion. Their purpose is to "open up the eyes" of the public to issues that are either unreported or underreported (Abreu, personal communication, April 9, 2006). You can find editorials almost anywhere; however, the best places to look would be newspapers or magazines since they have writers that are solely dedicated to editorial writing. Although editorials can be very effective, to do so they have to follow certain guidelines such as using the correct structure, achieving a good balance between facts and opinion, providing reliable evidence to support your opinion, and using your persuasion technique(s) effectively.

Works Consulted

"A battle over prisons." (2007, February 12). *The New York Times*, p. 20.

Cohen, A. (2007, February 12). "What W.B. Yeats's 'second coming' really says about the Iraq war." *The New York Times*, p. 20.

Hulteng, J. (1973). *The opinion function: Editorial and interpretive writing for the news media*. New York: Harper & Row Publishers.

MacDougall, C. (1973). *Principles of editorial writing*. Dubuque: WM. C. Brown Company Publishers.

"Making democracy credible." (2007, February 9). *The New York Times*, p.18.

Konradt, S. Home Page. Retrieved April 13, 2007, from <http://www.activeauthors.com/Article/How-to-Write-Better-Editorial-Articles/1746>

Krieghbaum, H. (1956). *Facts in perspective: the editorial page and news interpretation*. Englewood Cliffs: Prentice-Hall

Krugman, P. (2007, February 9). "Edwards gets it right." *The New York Times*, p. 19.

Rattner, S. (2007, February 6). "Fudging the budget." *The New York Times*, p. 34.

"The Art of Rhetoric: Learning How to Use the Three Main Rhetorical Styles." Retrieved February 10, 2008, from <http://www.rpi.edu/dept/llc/webclass/web/project1/group4/>.

"The comptroller choice." (2007, February 6). *The New York Times*, p. 20.

"The other defense budget." (2007, February 6). *The New York Times*, p. 20.

"While the Election Watchdog Wanders." (2008, January 31). *The New York Times*, p.A26.

My Paradise

JUN YANG

Jun Yang is a freshman Math major with a minor in secondary education. She moved to the United States from China in 2004. She knew exactly what she would write about when she was given the assignment in Professor Jane Rando's ENGL 101 course—the hillside she played on as a child in China. She wrote about this place believing that the joys of childhood should be shared with others.

The sweet potato plants covered the entire base of the hill. Their leaves are so green; the color drips to the ground. My friends and I crossed an almost invisible path through this green ocean. The baskets dangled around our arms and followed the tempo of our whistles. We got to our destination, the guava tree. Raising our heads, we looked up to the tree. Summer had brought back all the goodies. The branches were loaded with ping-pong ball size guavas. Lots of them had already turned yellow which only makes them taste better. Sunshine ran through the space in between the leaves and made the guavas so bright that we could barely open our eyes. The aroma of them was such a temptation; we put down our baskets and started in.

I was busy gathering guavas as my friend dropped them onto the ground. I was cautious, not wanting to be hit by one of them. Bing and her sister were like monkeys moving around the branches above, trying to create a rain of guavas for me. If we could we would have gotten them all, but the three baskets filled up quickly. On the way home, our skipping made some of the guavas run away from the baskets. The three trails of guava we left behind treated some little animals on the hill. Clouds around the edge of the sky started to take on some color, just as we began our picnic. We brought out the benches and piled up all of the guavas we had gotten. "It looks like a mini pyramid," Bing yelled out. Everyone started to laugh. I saw within faces expressions of satisfaction, like farmers after a good harvest. We all forgot about how upset we were the day before when we found out our tadpoles had run away.

A couple of days before, we had come up with the idea of hunting for tadpoles after the rain. The grass on the path was still wet, and the air was full with the fresh scents of wet grass and soil. We found a big puddle behind the reeds. All the duckweeds floating on the top made it hard to see these little lives, but their movement could not escape our eyes. We all held our breath and tried not to scare them away. Without hurting them, we slowly but quickly scooped them up with water. There were two on the first try. It was the first time I had actually seen them rather than from books or TV. I noticed that they were smaller than a pea but full of energy. We got six of them in total: a mother, a father, and four babies. At least we thought of it that way from their size. I donated my pretty plastic mug for their house. We pasted shiny papers on the mug and wrote "Home of Tadpoles" with a marker. We rushed to see them the very next morning, but they were gone. All of them, the father, the mother, even the four kids. Nothing left, except the tipped-over mug. They had all turned into frogs. That's what Bing's grandma said.

I tore the guava with my hands and finished the last one. We had supper at Bing's home, and her grandma had just harvested a ton of potatoes. She always had a good harvest of peaches and cabbages, she owned a large sweet potato farm. I never needed to worry about starving since my neighbor appeared to have enough food for three winters. I used to think that if I could not find a job when I grew up, I would just come back and plant all kinds of stuff on the hill like Bing's grandma. Steam rushed out from the pot after we removed the lid and the rich smell of these mini potatoes made us hungry again. We all sat on the floor, grabbed the potato, peeled it quickly, and tossed it into our mouths.

They were too hot to stay any longer in our hands. Utensils would only ruin this feast of nature. Everything tastes so different this way, especially sweet potato. Barbecue sweet potato! That is my favorite.

We hid our secret Barbecue spot with banana leaves. It was a one foot deep hole we dug behind the hill. Bing would sneak into her grandma's storage for a few little sweet potatoes, the smaller the better. We tried, but we could never cook a regular size one. Removing the three banana leaves from the hole, we placed a layer of dry straw at the bottom. We dropped in the sweet potatoes, and then covered it up with another layer of straw. Branches were our main fuel. The straw was easier to light up but it never lasted long. It was always chaos. "Hurry, we need more branches!" I threw the last one into the flame. Bing and her sister rushed to gather more. The last branch did not really help. The flame started to get smaller and smaller. "Oh, no. Please. Please wait." I prayed. I leaned forward and blew at the tiny flame, trying to save it. When it was almost hopeless, Bing and her sister finally came back with a handful of branches.

The smoke and the fire heated up the summer afternoon. We sat steaming in the oven we created. With a long branch, we dug out the sweet potatoes underneath the ash, and they fell out to the ground, blackened with smoke. We had to let them sit a while. I broke one with my hands. The bright orange color inside formed such a contrast to their skin. I bit into the bright orange; it almost burned my tongue. The smooth, rich, sweet taste made me fall back. I was in heaven. Bing and her sister buried their faces in the sweet potato. "Look at you! You look like a cat." I pointed at them, but I didn't notice that there was ash all over my face, too.

Spring and summer were our big event seasons. To hoe Machong was what spring meant to our league. Machong looks like scallion, but its root is round like a pearl. My mum would chop them up and mix them with potato powder and water. Then she would pour a layer of the mixture into a pan coated with a thin layer of oil. The result is a transparent, sticky pancake. All that evening, I could hear the sizzling and smell the pancakes from the neighbors. Machong season only lasts a couple of weeks in the spring. After the first spring shower is the best time to hoe them. We would each carry our small hoes over our shoulders, with a basket hooked to it. The Machong would usually grow in the cracks of the rocks or hide in the grass. With our hoes, we would carefully push aside the soil around the root since we did not want to hurt it: the root is the best part. Then we would hit the soil on the plant a few times with the dull side of the hoe to relax it, and then pull out the plant.

Mr. JinMin was with his cattle on the other side of the hill. We all stopped our work and waved at him. He waved back with a whip in his hand. He wore a straw hat with his pants rolled up to his knees. We could always see him around the hill with his cattle. He, his father, and his grandfather, all three generations in his family, raised cattle. But with Mr. JinMin, their family history had started to change. He has a fruit garden on the valley beneath the hill. In the garden, there are ten giant DragonEye trees. DragonEye fruit is famous in our country. Each pound of it is worth ten dollars. It has a natural sweet taste, and the products made from it are good for your health. So summer is Mr. JinMin's business period, and he was very busy trading his fruits on the market. But he never seemed to stop raising cattle, even though his garden had made him wealthy enough. Maybe he wants to keep his ancestral estate or maybe to finish his mission for his generation of cattle farmers.

Our baskets were full of Machong bundles. We beat the other two groups on the hill. We washed off the earth on our sandals near the stream. The water was so clear that we could see the rocks underneath. I stepped on one of the rocks and let the coolness of the water carry away the heat. Bing and her sister all joined with me to feel the current rush under our feet. After we washed all the Machong, we laid them out to dry on a bare slope. I lay down with my arms under my head and covered my face with a hat. As a little breeze came by, I started to take my nap. I woke up and followed the direction where Bing was pointing. There was a ship sailing into our harbor. We could see it clearly up on the hill. The sunset colored the waves brightly and the surface of the river looked like fish scales. The ivory ship made a track through the water and moved southward. "Hey! Wait!" we all started to run and tried to keep the ship in sight. With bare feet, and straw hats dangling on our backs, we ran through the hills as our laughter echoed through the valley and the kingdom of our childhood.

Honors Thesis

THE UNDERGRADUATE REVIEW

VOL. IV

Reading the Gardner: Viewership, Readership, and Public Art

NICOLE WILLIAMS

Nicole wrote this piece under the mentorship of Dr. Lee Torda. Nicole is currently a graduate student at Ball State University in Indiana.

It was a cold and windy January day as I stepped off the Green Line T at the Museum of Fine Arts station. As I pulled my scarf closer around my neck, I pushed my way around the bodies covered in North Face ski parkers and Ugg boots that were all heading to the large MFA building off to my right.

I had a different agenda.

With the sound of ambulance sirens ringing in my ears I looked up and saw a street sign that read Louis Prang St. I hurried down the sidewalk, crossing the street at the next intersection and saw the large sandstone building looming from behind a brick wall. The entrance to the Isabella Stuart Gardner Museum was facing the sidewalk and required passing through an iron fence with an open gate to reach it.

The organization utilized by Gardner in her museum requires interaction from the visitor and exemplifies the importance of the “critical visitor” who is held in high regard in modern museum theory. New theories of museum practices emphasize the need for visitors to be active and engage themselves with museum surroundings. Margaret Lindauer, who specializes in museum studies, discusses the steps a critical viewer should engage in when attempting to learn from a museum, in her article *The Critical Museum Visitor*. A critical viewer, after choosing an exhibit, needs to become aware of what they are expecting from the exhibit. Lindauer suggests that the viewer “...consciously describe. . . expectations, hopes, and assumptions” (204). Lindauer stresses the need for visitors to pay attention to how their own personal background can affect their experience at the museum. These questions should be addressed before attending the exhibit.

Landscape, according to Lindauer, plays the next essential role in viewing and critical thinking at the museum. When examining landscape, visitors should take into account the community in which the museum resides. Is it a big city? Is it a small town? Then consider the landscape of the museum itself, both inside and out. What is the architectural structure of the building? Is it functional? Is it flamboyant? What kind of a message is it trying to convey? In other words, what a viewer sees on the exterior of the museum can affect the message a visitor receives from the interior. The Gardner Museum rests on the outskirts of the hustle and bustle of downtown Boston, along the Fenway.

As for the interior of the museum, the critical viewer pays attention to how exhibits are installed. Is the museum public and organized in a typical gallery fashion? Or is it the arrangement collective like a private house museum? These observations are clues as to how to make sense of the exhibits. For instance at a house museum like the Gardner, the installations are about the relationships between the objects and not just the objects individually. The house museum arrangement is a tip to the visitor to pay special attention to the exhibits as a whole and to question the relationships between the objects. I have made numerous trips to the museum and continue to study the exhibits closely looking for answers to that question.

On that first day, the entire courtyard was bright with natural light that filtered in from the glass sky lights above it and, despite the harsh weather outside, there were lush green plants on just about every inch of stone and granite. The walls glowed a peach color and the sound of water trickled through Chinese fighting fish fountain at the head of the courtyard. The fountain sat just below the double-sided staircase that leads from the courtyard to the second floor. Balconies hung off the second and third floors, with marble columns around the entire space. In the middle of the space sat a tiled mosaic with a depiction of Medusa in the middle. My eyes darted about in amazement. I had never seen such architecture in person before. The details in the balconies, the statues from centuries ago, and the lush gardens all combined to give Bostonians a taste of nineteenth century European High Society. Retreating from the glowing courtyard I turned down a hall near the exit, quickly left my coat with a young girl, and took a swing through a small room off the hallway.

The room was dim, lit only by a soft yellow glow. The walls were covered with paintings, some portraits and other landscapes, on every side and around every corner. Along one wall there were cases that held old letters, written to Gardner, in penmanship that was too difficult to decipher. Looking at the letters and paintings together I started thinking that Gardner was preparing to tell me a story. A story that was just as much about her own life as it was about art. My thoughts were interrupted by an older, chubby woman with grey hair, wearing a badge around her neck that identified her as a museum worker. She came over and asked, "Did you just get here or have you already been through the museum?" Upon hearing that I had just got there she told me to be sure I went to the information booth to borrow a guide book before going up into the galleries. She explained that nothing was labeled and that I wouldn't know what anything was without a guide.

Interestingly enough that is exactly why I was visiting the museum. Through the reading of numerous articles, The Gardner Museum website, and a biography of Gardner I learned about the history of the museum as well as its founder. The art and collectibles within the museum's walls all come from the private collection of Isabella Stuart Gardner and her husband, John Gardner (Jack for short), gathered over the years via their wealth. In addition, Mrs. Gardner designed and oversaw the building of the museum at Fenway Court in Boston's Back Bay, ensuring everything was to her exact specifications.

An author and an artist both work to construct text and, although they have no control in deciding what the reader of the text will take from it, they choose the words or elements that make up that text. Theorist Louise Rosenblatt says, "the artist using the medium of words must, like other artists, make his appeal primarily to the senses if his desire is to reach the secret spring of responsive emotions" (48). Similarly the artist decides what he or she will paint, draw, or sculpt, then chooses the materials and colors for the project. Isabella Stuart Gardner can be thought of as the author of the Gardner collection. She personally composed and installed each of her exhibits throughout the building; the resulting relationships of art and space should be considered a text.

Gardner arranged her collection in a way that she thought would be most effective to the viewer. The style she implemented in her private museum is what is known as a house museum setup and could be compared to the arrangement of a living room. Currently, the Gardner is one of only six art museums in the world that use the house museum arrangement. The other five include "Musée Condé" in the Chateau Chantilly near Paris, the Wallace Collection in London, the Huntington Art Collection in Pasadena, the Frick Collection in New York City, and Dumbarton Oaks in Washington D.C. (Higonnet 135).

According to museum theorist Andrew McClellan, this organization involves "thematic arrangements that disobey normal sequences of school and period and new contextual approaches to nonwestern and religious art" (xvii). Gardner didn't pay attention to classifying according to genre, artist, or date, but rather paid attention to shape, color, and light. In this way the Gardner Museum is an intimate space in which viewers can experience art in a different way than at a traditional museum. Gardner did things, creating unheard of combinations of elements like Italian and French furnishings, that no one else dared to do. She left the labels out of her collection, unlike traditional museums, because she thought visitors shouldn't like something based on who it was attributed to, but rather that they should pay attention to each work and decide what they thought of it on their own.

She dared visitors to think for themselves when they came to her museum. The Titian Room on the third floor was Gardner's favorite room of all those in her home, housing her greatest masterpiece, Titian's *Rape of Europa*. After the painting finally arrived from Europe Gardner sat in the Titian room and admired the work for hours. She wrote in a letter:

I am breathless over the *Europa*, even yet! I am back here tonight... after a two days' orgy. The orgy was drinking myself drunk with *Europa* and then sitting for hours in my Italian Garden at Brookline, thinking and dreaming about her. (Goldfarb 118)

I climbed the marble staircase to the third floor, passing through the dark blue and gold of the Veronese Room where the angels in *The Coronation of Hebe* by Paolo Veronese dance across the ceiling, into the Titian Room glowing with afternoon sunlight from the courtyard. Immediately I was immersed in a sea of burgundy and gold which I associate with wealth.

The Titian Room is always buzzing with visitors. On an April afternoon, I wandered within the room's burgundy walls splashed with sunlight. I watched a guard in a dark suit hasten toward a tour guide as she enters with her group from the Long Gallery. The man is an older gentleman with a beard that matches the few white hairs that still cling to his head. He maintains a serious and almost intimidating expression at all times. Pointing toward the tour group already in the corner he motions the petite woman toward the exit. There were already about twenty five people in the room before the second group entered, and my guess is that more than one tour group can't be in a room at once.

As the second group crowds neared the exit I made my way over to the first tour group gathering in front of Gardner's favorite *Europa*, listening intently to their tour guide. A young woman with dark hair pulled back from her face pointed to the painting and explained, "You see how the tail of the bull here is not straight and leads the eye directly to Cupid?" She went on to discuss how Europa's body appears as if it is about to fall off the bull into the water and how Titian painted in a circular pattern, as all the elements of the work are in a circle.

The guide then talked about the elements surrounding the masterpiece and why Gardner installed them that way. My eyes glanced beneath the painting as I heard the guide mention that hanging below the painting is a piece of green fabric with a tassel pattern that was once part of a dress belonging to Gardner. Gardner had placed the textile there to reflect the green color in the water of *Europa*. The woman pointed out how a ceramic plate decorated with a blue wave pattern that rests on the table mimics the waves crashing on the shore in the Titian. She also

pointed out a sculpture, called a *putto*, sitting next to the plate, resting in the same position as the body of Europa. Listening to the guide I realized that the object surrounding this painting are not there just for a pleasing color display. The sculpture, fabric panel, plate, and other objects in the arrangement are positioned to help the visitor understand the painting better. By mimicking colors and positions the objects help reinforce and point out the details in the painting that a viewer might miss. Finally, the young woman said Gardner installed the painting in this location on the wall, near a window, so the morning sun could illuminate it each day.

Gardner wanted to educate her museum visitors and expose them to all the great cultures in the world that she and her husband were able to visit. When visitors come to the Gardner they are not just able to view masterpieces from renowned artists such as Rembrandt, Sargeant, and Botticelli, but they also step into rooms that hold unique collectibles from a variety of cultures. Visitors are able to see collections of original manuscripts, tables and chairs from Italy, France, and a handful of other countries, and, among other things, classic architecture of Spanish and Venetian design. To walk through the Gardner is like taking a voyage across the seas. It is this mixing of genres and elements that engages visitors and allows them to learn about cultures other than their own.

It is a difficult task to promote learning in an art museum. According to Falk and Dierking, authors of *Learning From Museums: Visitor Experiences and the Making of Meaning*, in order to intrigue a potential learner, a museum exhibit must present a certain challenge to the visitor as well as require skills in line with those of the visitor. In essence it must offer enough to capture and hold a viewer's attention. Not every exhibit will interest every visitor at a museum; instead visitors must freely choose what they want to look at, and if they want to learn from it. The exhibits picked are, "ones that interest the visitor and provide appropriate levels of intellectual, physical, and emotional challenge" (Dierking 25). The kinds of exhibits that generally ask a visitor to do work to make meaning are commonly found at Science and Children's Museums. For instance the Museum of Science in Boston has numerous hands on exhibits to help visitors, including an entire room where there is nothing but hands on experiments to learn about sounds, bones, and dinosaurs, among other things. Interactive exhibits promote learning and help viewers to commit facts and ideas to memory. Art museums tend to be a different experience because touching the collections is forbidden. Gardner tried to find an analogy to the interactive exhibit by asking her visitors to do work with her collection.

As I moved throughout the museum I participated in the kind of interactive work that Gardner had promoted. After exiting the lecture in the Tapestry Room I found myself in the Dutch Room among portraits of many important European figures including Mary Tudor and Queen Isabella. This room is dark, but the few fixtures and the sun from the courtyard provide enough light to view what was important just as Gardner, via Fenton, suggested to me. On the same wall as the doorway leading to the Tapestry Room, on the opposite end, hangs a portrait by Anthonis Mor of Queen Mary Tudor, whose face depicts a serious and strong demeanor but is softened by the light of the museum. She wears a dress of a deep green and rests upon a chair of red satin with gold embroidery.

Beneath this painting is a sofa, and to the right sits a chair of the same red satin and gold embroidery as in the painting. From the portrait of Queen Mary Tudor the light takes the viewer's attention around the corner, passed another painting, and to a portrait of a young boy who stands draped in a cape of red satin. Three chairs of the same color rest below. In this corner Gardner uses light to guide the viewer through important paintings, but she has also set up an installation that is pleasing to the eye and emphasizes the color red yet again. The furniture within this room, a sofa and chairs with intricate red and gold embroidery, reflect upon the lifestyle of those in the paintings. Lavish furniture could only have been afforded by those of a particular social class. By placing these expensive objects next to the portraits not only does Gardner provide a visually pleasing color palette, but she also helps to explain to visitors the social class and lifestyle of those in the paintings. Each element of the displays in this room come together to speak this story and, in this way, the entire exhibit, furniture and all, not just the paintings, becomes the masterpiece.

Multiple elements like those Gardner used for her installations wouldn't be found together in a public art museum, and that is what makes the experience of the Isabella Stuart Gardner Museum unique. A public art museum can be thought of as a traditional art museum in its set up. The characteristics that would constitute traditional museum design include classification among genres and time periods, as well as labels for each piece. In the introduction to the book *Art and its Publics: Museum Studies at the Millennium* McClellan explains that, "In the modern era, the rational classification of art has meant the separation of art types and media, high from low, western from non-western, and organization by nationality, or 'school', and historical period" (xvii). The Museum of Fine Arts in Boston is an example of the traditional museum.

Each piece at the MFA has a label that gives its title, artist, medium, and size. I visited one of the special exhibits entitled

Degas to Picasso which looks at modern works. I moved along the flat gray walls while the bright spot lights led my gaze from canvas to canvas, my eye consistently drifting to labels, some rather large with as many as 25 lines of text, next to each painting. After the standard information mentioned above, there was a paragraph that discussed what the painting was about and what the artist was trying to attempt. I moved to the next canvas and found the same thing.

New museum theory stresses that, "object labels start with concrete visual information and extend to no more than 50 words" (Lindauer 213). Private museums, such as the Gardner, use no labels or labels with very little text like that proposed in new museum theory. The labels used at the MFA prohibited me from trying to make any separate meaning from what I was viewing. Each label was so large that my eye was immediately drawn to it and as a result I read the museum's interpretation of the painting before I even had the chance to analyze it. I found myself looking for the interpretation written on the label instead of attempting to make my own.

Back at the Gardner there are more than enough opportunities to make meaning, connections and interpretations. The Early Italian Room on the second floor is currently closed while the collection undergoes preservation and new lighting is installed, but I have visited it many times and find it a very intimate space. Walking to the wall on the right of the stairwell I see a large rectangular painting with a blue background labeled *Pessollino (1423-1437) Cassoni Panels*. The museum guide book explains that this is one of two panels (the other hangs on the other end of the wall), originally the decorative front panel of a *cassoni* chest that held the valuables of an Italian family. This particular panel is called *The Triumphs of Fame, Time, and Eternity* and was painted by Francesco di Stefano. Glancing to the case below the painting, I lean in closer to get a better look at the jewels inside it. There are a number of beads on the left of the case that appear Chinese in style and contain colors that are all visible in the *Cassoni Panel* above. There are blues and warm tones of pink that reflect within both items. The case also contains a table cloth the same shade of blue as the background of the painting and the two chairs to the left of the case and two to the right are upholstered in this blue.

The Early Italian Room may be small and feel rather crowded with the combination of furniture, art work, and other collectibles, just like in all of the galleries of the Gardner, but color, arrangement, and light guided my eyes through the aspects of it. The small space also works because it creates a very intimate atmosphere, similar to that of a chapel, which is suitable for the numerous religious works on display in this room. Again the experience was different than the MFA because it is about all the elements working together to produce a meaning larger than sum of its

many parts. Looking at the *Cassoni Panel* in combination with the case of beads and the chairs around it is different than just looking at the panel alone. It becomes more about understanding why the items are together rather than just about one piece of art.

When viewers put to work making meaning from an exhibit it is what museum theorists Falk and Dierking call a “flow experience.” The flow experience satisfies museum visitors’ thirst for knowledge. Visitors are left with a sense of accomplishment which encourages them to continue searching for meaning from other exhibits (Dierking 25). That is exactly the feeling I had when I made the connections between the items in the Raphael room and their reflections upon the standing in society of those depicted in the portraits hanging on the walls. I was excited that I had understood the challenge Gardner had presented me with. I was in charge of the process of interpreting and composing.

As I sought to make meaning at the Gardner I realized the experience was very similar to the interpretations I make when reading. I dig through the pages of a novel, pulling out bits and pieces of information, trying to make meaning. I pay close attention to some characters and discard others. I make lists of themes that interest me in a novel and focus in on them while casting others aside. As a reader I am in charge of the text and of what I choose to do with the material I take in, just as I am in charge of understanding the exhibits at the Gardner. The author of a text has put the elements all together for the reader but it is the reader who decides what to do with them.

What readers do with texts is to infer from their own knowledge of the world to fill in gaps and blanks in texts. Critic Terry Eagleton refers to this process as reception theory (64). With reception theory, “The text itself is no more than a series of ‘cues’ to the reader, invitations to construct a piece of knowledge into meaning” (Eagleton 66). The process of inferring meaning from a text is how a reader communicates with it. When a reader infers meaning from a text, or an art exhibit, they do so based on their own knowledge and that means that each interpretation will be different, because each reader has their own personal set of beliefs and knowledge that make up the background which they will use to infer meaning. According to Rosenblatt, the reader, “must draw on his past experience with life and language as the raw materials out of which to shape the new experience symbolized on the page” (25). In other words the reader relates what she reads on the page to her own life and interprets using what she knows from her own life experience. Since each reader has different values and experiences each interpretation of a text will be different.

Reception theory is applicable to more than just written texts. Its ideas lend nicely to museums as well and the role of the critical museums visitor, which involves examining the written aspects of the exhibit. A critical viewer should consider how much is said and how much is not said in writing. Lindauer suggests, “Read between the lines. Whose knowledge is presented? What is explicitly asserted and what is implied or unspoken. . . .To whom does it speak and for what purpose?” (213). These kinds of questions provoke emotions about the exhibit and help to give an understanding of its purpose and theme. Because the Gardner Museum relies very little on the written word, its visitors must ask a lot of questions about the *theory* behind Gardner’s exhibits and follow the steps of a critical museum visitor.

Of course it is highly doubtful that visitors self-consciously follow the steps of the critical visitor, checking them off as they complete each one. It is a lot of work to ask a visitor to do such a thing. However, the Gardner uses the visual to evoke questions of its visitors so that they subconsciously follow the steps of the critical visitor. In the book *Picturing Texts* the authors, who focus on the study of visual rhetoric, explain that, “In addition to thinking about the immediate and broader contexts, you also need to read with an eye for intertextuality, the way the texts build upon and consciously refer to other texts” (Faigley 16). The Gardner asks that visitors build upon each object that they examine and decide why things are relational to one another. The idea of building upon the visual messages speaks back to reading theory and the building upon gaps and cues in the text.

From what I have seen over the past months, there are those who visit the Gardner with the mindset that it is a typical museum; they simply come to look at the great masterpieces that call it home. Still there are others that meander through without guidebooks, open to all Gardner has to offer as a unique, one of a kind experience. They learn to appreciate the museum in the way I have come to.

On a visit early this summer I was walking through the Tapestry Room and noticed two women juggling guide books and maps, long, black, telephone-shaped audio guides pressed to their ears. The women were both about 5’5” and looked to be in their 50’s, wearing cropped pants, blouses, and walking sneakers. Standing in the back of the room I busily read a sign informing visitors that the Early Italian collection is being stored in the Tapestry Room while the room is closed and notice the two women by the windows glancing from their books up to the walls. Clearly they were searching for something. After a few moments the two women stop in front of the *St. Engracia* painting and press their audio guides to their ears. After they are finished they move on to the next room, the Short Gallery, which I entered moments before them. They stopped to look at nothing else along the way.

As I flipped through the cases of pencil drawings on the right side of the room, just to the right of the entryway, one of the women says to the other, "What room is this? It must be the Little Salon." Not convinced with her guess, she asked the guard who is seated in a small chair near the other door way. "This is the Short Gallery," answers the petite dark haired woman in an unidentifiable accent. The two women go back to their books and press their guides back to their ears as they move to the painting of Gardner in Venice by Anders Zorn, hanging on the opposite end of the wall where I continue to peruse the drawings. A minute or so passes and the women move out of the corner having looked at nothing else.

On that same summer afternoon I noticed a family, an older balding gentleman with silver hair, a middle-aged woman of Asian descent who could possibly have been his wife, and a young dark haired girl, about fifteen. The group moved through the museum at a slow pace, admiring everything closely, without guides of any kind. I first came across them in the Short Gallery while the two women viewed the Zorn painting, and I watched them yet again in the busy Raphael Room. As I stood on one of the small balconies looking down into the courtyard, the family examined the *Tragedy of Lucretia* by Boticelli. Turning around to leave the balcony I saw the silver haired man and young girl bend down to get a better view of a painting that lay across the front of a chest which sits on the ground beneath the Boticelli. I saw the family again upstairs on the third floor where they walked down the Long Gallery and lifted the cloths that cover the display cases that line each side of the narrow room, examining the letters and books displayed in each.

I am sure Gardner would have happily befriended the family of three as they made their own meaning as she had wished. But was either of these groups doing anything wrong? Maybe not. The two women simply felt they got more out of the museum by studying the masterpieces, while the family enjoyed the whole experience of the museum. Each group had their own beliefs that guided them through their viewing and reading of the text of the Gardner. However, according to reception theory, those that worked to make meaning on their own learned more. The family at the Gardner didn't bother with maps or audio guides that colored their views and told them what to think. They took the text as it was and built connections based upon what they were given. They engaged in the steps of a critical viewer and examined and questioned the landscape of the museum. As readers continue to infer and make connections with a text, they are building knowledge. Making meaning from a text involves building up knowledge as you read through it or, in the case of a museum, walk through it. Eagleton writes:

Reading is not a straightforward linear movement, a merely cumulative affair: our initial speculations generate a frame of reference within which to interpret what comes next may retrospectively transform our original understanding, highlighting some features of it and back grounding others. (67)

For instance when readers are working with a text, they are dealing with themes, characters, setting, and plot. If a character is introduced on page four and is not spoken of again until page fifty-four, the reader needs to remember what they learned about the character back on page four. A reader needs to cue up that knowledge and bring it back into the frame of what they are working with. Readers then have to decide what parts of a text are important on the journey to making meaning and what parts they don't need to consider at that moment. For instance in the novel *Edgar Huntly* by Charles Brockden Brown, the reader is introduced to the character Saresfield for the first ten or so pages of the book and then he is gone. There is no explanation of where he went or what happened until he reappears again some 200 pages later. What's a reader to make of that? A similar situation occurs in the novel *Uncle Tom's Cabin* by Harriet Beecher Stowe. Here the author continuously moves back and forth between multiple story lines, which requires the reader remember the details of each one even if a particular situation hasn't been talked about in 50 pages. A reader also needs to be aware of what is said in a text and what is implied or left out. According to Iser, "what is concealed spurs the reader into action, but this action is also controlled by what is revealed; the explicit in its turn is transformed when the implicit has been brought to light" (34). The blanks between what is revealed and what is not work as a space for readers to create meaning.

At the Gardner Museum visitors have to keep track of all information, just as readers of a text do. I constantly learn new things or see new things each time I visit. Recently I noticed that in the Gothic Room, on the third floor of the museum, the top of the wall all the way around the room is adorned with miniature portraits. Somehow I had missed those paintings each time I had previously visited. So now the room had more to it that I had to think about. There were all the things I had seen prior to this recent discovery and these new paintings to add along with that knowledge. Reading is a constant movement back and forth; it is a process of intellectual growth. The mind is challenged to decide what is important, what is not, and what those important elements mean. So to with the Gothic Room's furnishings: the small paintings on the very top of the wall help to break up the dark wooden rafter ceiling and dark browns of the room. Gardner has drawn attention to the architecture of the room that is above eye level by using the paintings to lure the eye up.

Building knowledge, making connections, and filling in gaps in a text results in learning new knowledge that could not have been gained otherwise. When readers are asked to do work with a text they receive more information from it. The same can be said of museum visitors who learn more from an exhibit in which they are asked to participate. Eagleton says of this kind of work that asks for participation from the reader:

Rather than merely reinforce our given perceptions, the valuable work of literature violates or transgresses these normative ways of seeing, and so teaches us new codes for understanding. (68)

A reader that puts work into a text will be rewarded with meaning from that text. That meaning is developed only through stages of building knowledge while working with the text. The key though is for the work to be put in. If a reader has no interest in a particular work, or no knowledge of the subject, he or she will not be able to find that meaning. Also there are simply some readers that won't be willing to do the work. I constantly passed visitors at the Gardner, such as the two women, who were not putting in the work to get the most meaning. I myself have read books that I have no interest in and don't bother to engage in the effort to develop meaning. It is the readers' choice whether or not he or she will attempt to make meaning. But that is the choice of the reader and that is the point of the whole argument of reception theory and free-choice learning: the reader has been presented the opportunity to learn.

Today more and more Americans are visiting museums in search of new information. Falk and Dierking write, "Today...somewhere between two and three out of every five Americans visit a museum at least once a year" (2). They argue that Americans are realizing the important role museums can play in their lives if they choose to participate in the learning process. Of course this learning can only occur if the museum exhibits are set up to challenge the visitor. A museum like the Gardner does more than simply motivate visitors to participate; it *requires* them to. When visitors can interact with an exhibit and it engages them intellectually, they are more likely to remember it. Thus, their experience stays with them beyond the length of the trip and becomes a part of their working theory of the world, a working theory made richer for interaction with the remarkable text of the Gardner.

In recent years curators have begun to implement elements of the private museum into their installations. Theorist McClellan acknowledges:

Lately we have come to recognize what has long gone unseen, namely that public museums are also the product of individual choices and curatorial vision, and we now find curators acknowledging authorship of installations (in the form of signed wall labels) and museums experimenting with alternative, in some cases pre-modern ordering systems. (xvii)

He goes on to state that, "ironically, private collections like Gardner's, once the embodiment of everything rejected by the large survey museum, have become a model of sorts for progressive installations" (xvii). It has taken almost a century for museum curators to embrace a new concept for museum organization. Perhaps they have realized that Gardner, who implemented the house museum style in her own museum over a century ago, was right all along when it came to immersing people into the world of art. In her article "Museum Insight" Anne Higonnet says, "class, gender, nationality, and race" play a role in the construct of private museums (135). Having these elements within the Gardner result in museum visitors that leave not only with a better understanding of art, but also with knowledge pertaining to the social construct of the world they live in.

Works Consulted

- Blair, Carole. "The Art Museum, Rhetoric, and Subjectivity", *The Review of Communication* 1(2001): 43-45.
- Boyarin, Jonathan, ed. *The Ethnography of Reading*. Los Angeles: University of California P, 1993.
- Clifford, John, ed. *The Experience of Reading: Louise Rosenblatt and Reader-Response Theory*. USA Boynton/Cook, 1991.
- Dickinson, Greg, Brian L. Ott, and Eric Aoki. "Spaces of Remembering and Forgetting; the Reverent Eye/I At the Indian Planes Museum." *Communication and Critical/Cultural Studies* 3 (2006): 27-47.
- Eagleton, Terry. *Literary Theory: an Introduction*. 2nd ed. Minneapolis: The University of Minnesota P, 1996.
- Faigley, Lester, Diana George, Anna Palchik, and Cynthia Selfe. *Picturing Texts*. New York: WW Norton, 2004.
- Falk, John H., and Lynn D. Dierking. *Learning From Museums: Visitor Experiences and the Making of Meaning*. Walnut Creek, CA: Alta Mira P, 2000.
- Goldfarb, Hilliard T. *The Isabella Stuart Gardner Museum: a Companion Guide and History*. New Haven Yale UP, 1995.
- Gross, Alan G. "Presence as Argument in the Public Sphere." *Rhetoric Society Quarterly* 35 (2005): 5-21.
- Gross, Jennifer R., and Lewis Hyde. *Lee Mingwei: the Living Room*. Boston: Isabella Stewart Gardner Museum, 2000.
- Hubbard, Bryan, and Marouf A. Hasian Jr. "Atomic Memories of the Enola Gay: Strategies of Remembrance At the National Air and Space Museum." *Rhetoric and Public Affairs* 1 (1998): 363-385.
- "Isabella Stewart Gardner Museum." *The Wallace Foundation*. 7 Dec. 2005 <www.wallacefoundation.org>.
- Iser, Wolfgang. *Prospecting: From Reader Response to Literary Anthropology*. Baltimore: John Hopkins UP, 1989.
- Marstine, Janet, ed. *New Museum Theory and Practice*. Oxford: Blackwell, 2006.
- McClellan, Andrew, ed. *Art and Its Publics: Museum Studies At the Millennium*. UK: Blackwell, 2003.
- Ozernoy, Ilana. "The Art of the Heist." *U.S News and World Report* 139 (2005): 42-44. *Academic Search Premier*. EBSCO. Bridgewater State College, Bridgewater. 7 Dec. 2005. Keyword: Isabella Stewart Gardner.
- Rosenblatt, Louise. *Literature as Exploration*. 5th ed. MLA P, 1995.
- Sontag, Susan. *Against Interpretation and Other Essays*. New York: Picador, 1961.
- Sontag, Susan. *Where the Stress Falls*. New York: Picador USA, 2001.
- Stewart, Arlene. "Feasting At Isabella's Table." *Victoria* 12 (1998): 82-86. *Academic Search Premier*. EBSCO. Bridgewater State College, Bridgewater. 7 Dec. 2005. Keyword: Isabella Stewart Gardner.
- Taylor, Bryan C. "Bodies of August: Photographic Realism and Controversy At the National Air and Space Museum." *Rhetoric and Public Affairs* 1 (1998): 331-361.
- Tharp, Louise H. *Mrs. Jack*. Boston: Isabella Stewart Gardner Museum, 1965.
- Villanueva, Victor. "Research in Rhetoric." *Research on Composition: Multiple Perspectives on Two Decades of Change*. New York: Teachers College P, 2006. 170-186.

Shea Scholar Award

THE UNDERGRADUATE REVIEW

VOL. IV

The Bridgewater Alumni Association (BAA) established the Shea Scholar Award during the 1987-88 academic year in honor of Dr. Ellen M. Shea, Dean of Students Emerita. A graduate of the Class of 1935, Dr. Shea returned to her alma mater and served first as Dean of Women and later as Dean of Students. Her distinguished career in education, her concern for the welfare and success of students, and her role as mentor to generations of Bridgewater students served to guide the Association in the design of the criteria for this prestigious award which is funded through a generous bequest left by Dr. Shea to the college for the purpose of scholarly assistance. The awards are presented by the BAA's Shea Scholar Committee, chaired by Carol Wilusz Kryzanek '69. Jean Cabral is the 2007 recipient of the Shea Scholarship, and we proudly present her work here.

Clara Schumann: A One-Woman Musical Dynamo

JEAN CABRAL

This project was an opportunity to learn about the life and works of Clara Schumann (1819-1896), probably the most important female musician and composer of the 19th century. The difficulties this great composer faced throughout her life give insight to her courage and audacity. She continued to write music against the wishes of her husband and society's view of a woman's role and took on the responsibility of providing for her family after her husband's mental breakdown. Clara's story is rich with turmoil, passion, and creativity—one worth telling.

Through my research and study of her music, I wrote and performed a one-woman play which was highlighted by performances of her beloved songs. In character, I told the story of Clara, dressed in appropriate attire reflecting this time in history, and performed songs she wrote as well as music written by her composer-husband.

This one-woman musical play was a unique way to bring a historical figure to life. All too often I have attended presentations that consist of lectures, PowerPoint shows, or standard recital performances. By engaging an audience in this lively and entertaining format they will learn much about music style and history as well as gain keen insight into the status and plight of women at the time. This musical performance-play was performed on campus for school children and could be performed as well in other locations.

The majority of research, writing, learning of music, and costume design was done during the summer. This work would not have been possible without the funding provided through the Shea Scholar Program. I had many resources at my disposal: practice rooms in the music department, Maxwell Library and other libraries as well as the internet, recordings, a qualified accompanist Jim Hay, my vocal professor Martina Ferrante, and, of course, my mentor Dr. Deborah Nemko. With Dr. Nemko's assistance, who herself did her doctoral research on Clara and Robert Schumann, I was able to focus on approachable music and prepare a script that is both educational and entertaining.

The nature of this project truly immersed me in the life of Clara Schumann and gave me a much deeper appreciation of this important figure in music history—one I wish to share with others.

LIGHTS UP ON FORESTAGE. STAGE LEFT: A dress form and a small table are on the stage. On the dress form is a black costume from the 1800s. On the table is a Styrofoam form with a gray wig, a mirror, and a diary. CENTER STAGE RIGHT: A grand piano and piano bench are set up for a performance. Clara enters STAGE RIGHT and travels across stage to the dress form and table. She proceeds to get dressed. As Clara is dressing, the accompanist enters STAGE RIGHT, sits at the piano, and goes through finger exercises. Clara finishes dressing and puts on wig, picks up the diaries, and assumes her character. She moves to CENTER STAGE in front of the piano and places the diaries on the piano.

Clara: Guten Morgen. Ich heisse Clara Schumann.¹ Oh, I am so sorry; I forgot that some of you may not speak German. This is good; I have an opportunity to practice my English with you today. My father made sure that I studied French and English as a child to prepare me for trips to France and England.² There was a time when I had hoped to travel to America, but alas, this was never to be.³

So...welcome to Germany. I am so happy to see all your young faces. You know, I was just about your age when Father started arranging my concerts. First I started to play for company at home above my Father's "shop." Father had a very busy piano factory business, what we call a *Piano-Fabrik*. He had a music lending library, rented, sold, tuned, repaired pianos, and taught lessons. Father would say "he stood behind every piano he sold."⁴ Friends and visiting musicians often gathered there. He made sure I had an opportunity to perform—and of course, to meet the right people. Father also arranged concerts in homes of his acquaintances...and then, my first real public appearance—the *Gewandhaus*! (I was nine years old) I did not have a major part in the concert, but oh, the doors that opened for Father and me after I played.⁵

1. "Name," *Collins German Concise Dictionary* (New York: GarperCollins Publishers, 2007), p. 671.

2. Bowers, James and Judith Tick. *Women Making Music; The Western Art Tradition, 1150-1950* (Urbana and Chicago: University of Illinois Press, 1986), p. 255.

3. Reich, Nancy B., *Clara Schumann The Artist and the Woman* (Ithaca, NY: H. Holt and Company, 1945), p. 269.

4. *Ibid.*, p. 6.

5. *Ibid.*, p. 22.

We met so many people—and one very special man that changed my life—my Robert. Our first encounter was at a mutual friend's home, another concert my Father arranged. I was so young and impressionable and he was so handsome and so mature, nineteen years old. (I think maybe he may have been a little jealous of my playing.) Robert had heard of my Father's reputation as a teacher and sought him out. Robert's family had expected him to become a lawyer, but his love of music changed those plans. Ah, the power of music. His family was so reluctant but his mother

finally wrote a letter to Father begging him to take Robert on as a student. Father was hesitant because rumors do spread and it had been said that this young man fell "in love with every pretty woman he saw"⁶ and was irresponsible with money, (Clara puts her hand close to her mouth and whispers to the audience)...and even drank and smoked.

It was such a joy to have Robert move into our home as a student and boarder. Father had a regimented schedule for my

training. Working side by side with Robert made my training all the more enjoyable. The year that Robert lived with us was such a glorious time. He would spend time with my brothers and me in the evenings playing games and telling ghost stories.⁷ It was like having a special soul mate—someone that I could confide in and with whom I could truly express myself.

My concert tours often took me away from home, and each time I went away it was harder and harder to be apart from Robert. I was falling in love! Oh, what a feeling! The pleasure, thrill, excitement, joy, adventure, delight, bliss, and rapture all made me feel as if I could burst from happiness. It was almost as if I was being caught up in the twirling and swirling of a waltz. You know, the dance that some who are old fashioned think is so scandalous just because the man holds up his partner's dress so it will not trail or be stepped upon and partners are wrapped together tightly as possible in an embrace when they glide around the dance floor.⁸ (Clara demonstrates lifts her skirt and demonstrates the waltz) In fact, I wrote music for a song that describes that incredible feeling—"Walzer." The poet who wrote the lyrics expressed much

6. *Ibid.*, p. 38.

7. Nemko, Deborah. *Clara Schumann as Inovator and Collaborator: The Piano Trio in G Minor, Op. 17* (Ann Arbor, MI: UMI Company, 1997), p. 18.

8. "History Repeats Itself," pythia.uoregon.edu/~llynch/Tango-L/2001/msg01071.html-8k.

of how I felt then and it was such a delight to compose music that captured that moment in time. I have a little challenge for you when you listen to this song. Let us see how often you hear the word “love.” Hmmmm, too easy. I think maybe I should sing this in German and you must listen for the German word for love: *liebe*. No cheating now, the program may not have all the repetitions included so you must really listen.

Clara and accompanist: (Clara assumes appropriate singing posture and “Walzer” is performed.)

Horch! Welch' ein süßes harmonisches Klingen:
Flüstren erhebt sich zum jubelnden Laut.
Las mich dich, reizendes Mädchen, umschlingen,
wie ein Geliebter die liebende Braut.
wie ein Geliebter die liebende Braut.

Komm! Las mit den wogenden Tönen uns schweben,
die uns wie Stimmen der Liebe umwehn;
die uns wie Stimmen der Liebe umwehn;
So uns der seligsten Täuschung ergeben,
glücklich es wahren, was nie kann geschehn.
glücklich es wahren, was nie kann geschehn.

Auge in Aug emit glühenden Wangen,
bebende Seufzer verlangender Lust!
Ach! Wenn die Stunden der Freude vergangen,
füllet nur trauernde Sehnsucht die Brust,

nimmer erblüht, was einmal verglüht,
nie wird die resige Jugend uns neu,
o drum, eh' das Feuer der Herzen verglüht,
Liebe um Liebe, noch lächelt der Mai.
o drum, ehe das Feuer der Herzen verglüht,
Liebe um Liebe, noch lächelt der Mai.

Horch! Welch ein süßes harmonisches Klingen,
Flüstern erhebt sich zum jubelnden Laut.
Las mich dich, reizendes Mädchen, umschlingen,
wie ein Geliebter die liebende Braut.
wie ein Geliebter die liebende Braut.⁹

Clara: How did you do? How many heard the word ten times? How many heard the word fourteen times? Well, I will say that both are correct. You see the noun “Liebe” appears ten times and the adjective “liebende” four times. Just as in English: love and loving. Wunderbar! (Said slowly.) Oh, sorry, wonderful! (Said equally deliberately slowly.)

9. Schumann, Clara, *Samtliche Lieder für Singstimme und Klavier* (Germany: Breitkopf & Hartel, 1992), pp. 10–15.

Oh the trials and tribulations of love. Robert and I had such an incredibly strong bond—music—and our letters. There were so many times that I was away on tours. Father booked as many concerts as he could and these appearances took me to so many places: cities throughout Germany—Hamburg, Berlin, Dresden—and Paris. Letters bridged the distance between us and I grew to depend on those precious words from Robert.

Let me read an excerpt from one of my favorites. (Clara pulls a letter from her diary and reads):

Dear good Clara,

I am going to ask you to do me a favour. As there is no electric current between us to remind us of one another, I have had a sympathetic idea, namely that to-morrow, exactly at eleven o'clock, I shall play the Adagio from Chopin's Variations, and shall think intensely, exclusively, of you. Now my petition is that you will do the same, so that we may meet and communicate in spirit...If there were a full moon, it might have been a mirror reflecting our letters.

With all my heart, I remain

ROBERT SCHUMANN.¹⁰

Much happened while I was away. When I returned from one of my trips my dear Robert had done something terrible to his hand. He attempted to have one of his fingers strengthened with a strange contraption. He felt that his weak finger hampered his ability at the piano and this procedure would enable him to perform better. He had such high hopes, but the contraption failed and he no longer could play as he had before.¹¹ This man could not perform the beautiful music he composed as he wanted and I was determined make his music known...I would be his instrument, interpret his creations, and introduce them to the world. I felt closer than ever to my beloved.

And, of course, I did hear rumors of Robert's attention toward other women. (Clara places a hand on her hip) Well, two can play at that game. I certainly had many an opportunity to meet eligible bachelors on tour. Amazing how Robert became interested in me once again upon hearing of my adventures.

It did not take long for Father to recognize how Robert and I felt about each other. He was not pleased! Although Father opposed our relationship, he still allowed me to perform Robert's works at concert. Father realized that Robert had an incredible talent.

10. Herbert, May, *Early Letters of Robert Schumann* (St. Clair Shores, Michigan: Scholarly Press, 1970), p. 204.

11. Hanning, Barbara Russano, *Concise History of Western Music* (New York: W. W. Norton & Company, 2006), p. 430.

The bond I once had with my Father was disintegrating and this man who had managed all my performance affairs cut me off. My first experience on my own was in Paris. Not only did I have to memorize and practice my music, I also had to attend to a long list of details that included (Clara counts these off on her fingers): renting a hall and instruments, having the piano tuned, hiring supporting musicians, finding wealthy and influential patrons, printing tickets, giving complimentary tickets to the right people, arranging heating and lighting, advertising in newspapers and getting posters made, having appropriate concert attire. It was so overwhelming, but I did it! My concert was a success and I discovered an inner strength that I never realized I had!¹²

Robert and I made plans to marry, but Father would not have it and the law was on his side—I could not marry without his permission until I turned 21. He warned me that if I married I would destroy my career as composer and performer. Robert and I had to file a lawsuit to set aside the need for Father's consent.¹³

After many years of conflict with my Father, Robert and I won the court settlement and we were married—one day before my twenty-first birthday. My dream of being Robert's wife became a reality. And oh, such a wedding gift I received from my husband—he composed a cycle of songs, eight in all, that mirrored a woman's experiences throughout life starting “when she meets the man she will marry and ending with his death, leaving her only with memories.”¹⁴ One song I would like to share with you is “Thou Ring Upon My Finger.” The lyrics have such a sweet meaning to me for the ring that Robert gave me (Clara lovingly gazes at the ring on her hand) changed my life.

I think it is time for another challenge. I want you to listen for something referred to as Rondo—the melody heard at the beginning of the song comes around again.¹⁵ This will be quite easy for you since I am singing in English this time. In “Thou Ring Upon My Finger” I would like you to determine how often you hear a repeating melody.

Clara and accompanist: (Clara assumes appropriate singing posture, this time gently holding her hands so her wedding ring is clearly visible, and sings “Thou Ring Upon My Finger”)

Thou ring upon my finger,
My beautiful ring of gold,
My lips on thee fervently linger,
And close the dear treasure to my heart I hold.

My childhood's dream had vanish'd,
A joyous dream serene and bright;
Alone I seem'd as if banish'd
To desolate regions of night.

Thou ring upon my finger,
Hast giv'n to glad thoughts a birth,
Forbiddest clouds to linger,
Transformest to rapture my life on earth,

And I'll live for him and near him,
Will always his remain,
To serve him, to bless and to cheer him,
His glance of approval to gain, his approval gain.

Thou ring upon my finger,
My beautiful ring of gold,
My lips on thee fervently linger,
And close the dear treasure to my heart I hold!¹⁶

Clara: So let us see, how many times did you hear the opening melody? (Clara waits for a response) Very good, three times!

On the first morning as man and wife Robert presented me with a diary. On the first page he wrote:

My most beloved young wife!...The little book which I open herewith has a very particular intimate meaning; it is to record everything that affects us together in our household and married life, our wishes, our hopes shall be written down in it...In short, it shall be a good, true friend to whom we will confide everything, to whom our hearts shall be opened...”¹⁷

12. Bower, p. 269.

13. Reich, p. 79.

14. Kimball, Carol, *Song A Guide to Style & Literature* (Redmond, Washington: PST...INC, 2000), p.89.

15. Randel, Don Michael, ed., *The Harvard Concise Dictionary of Music and Musicians* (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1999), p. 572.

16. Schumann, Robert, *85 Songs for Voice and Piano* (New York: International Music Company), pp. 36-37.

17. Burk, John N., *Clara Schumann A Romantic Biography* (The United States of America, Random House, Inc., 1940), p.213.

We took turns writing in our marriage diary--the first of many. Each week we would pass the diary from one to the other.¹⁸ Oh, to know the thoughts of my beloved. For so long I was unable to freely express my inner emotions in my diaries. My Father began my first diary for me when I was seven, writing in my name and supervising and examining all that I wrote. He made me copy "letters he wrote to associates, friends, and enemies."¹⁹ I suppose this was his way of educating and communicating with me; I would receive information, praise, and criticism through the pages of my diary. I often felt as if he was molding my personality.²⁰

Our first year of marriage was bliss. I was with the man I loved. We spent much time with our music. Robert had become editor of *neue Zeitschrift für Musik* (in English it is New Journal of Music), a journal he founded that contained reviews and essays²¹, and we would spend time with our heads together studying scores and discussing compositions. And oh how Robert spent time composing his work.

Of course I had been trained in composition and wrote music of my own. I never felt as comfortable with my work as Robert did with his. You see, during my lifetime people believed that women were not as capable of composing music as men. Many women have had to write under pseudonyms to be published, using either their father's, husband's, or a friend's name. If a composition is written by a man, it has a better chance of getting published.²² Robert offered to look over my work, and although I truly appreciated his comments I felt that what I had written was strong enough to stand on its own.

It was not easy for two artists to be in the same household. I knew I could not disturb Robert when he wrote which meant I could not spend time at the piano. Pretty soon the novelty of our new

life started to wear and my desire to return to performance won out. Robert did travel with me at first, but as our family grew he would stay at home when I toured. I felt so strongly about my art that I continued to play even "in advanced stages of pregnancy."²³ This was not customary in my day and women did not discuss pregnancy or appear publicly. It was referred to as "physical sufferings" or "health problems."²⁴ Since Robert and I had eight children—(Clara counts them off on her fingers) Marie, Elise, Julie, Emil (who died as an infant), Ludwig, Ferdinand, Eugenie, Felix—

I often appeared in public although I had (Clara makes a set of quotations in the air) "health problems." Robert did well to care for the children, but as our family grew they were sent to stay with relatives or attend boarding schools.²⁵

Although we loved each other fiercely our life was not destined to be one of happiness. Robert was "troubled by depression and melancholy," he lost the one position in which he earned a

salary as a municipal music director in Düsseldorf, "he suffered hallucinations and tried to commit suicide."²⁶ Robert committed himself to an asylum and I was not allowed to see him for two years. My song, "Sie liebten sich beide," expresses the anguish I felt at that time. I would like to share this with you.

Clara and accompanist: (Clara assumes proper singing posture and performs "Sie liebten sich beide")

Sie liebten sich beide, doch keiner
wolt' es dem andern gestehn.
Sie sahen sich an so feindlich,
und wolten vor Liebe vergehn.

Sie trennten sich endlich und sah'n sich
nur noch zuweilen im Traun.
Sie waren längst gestorben
und wusten es selber kaum.²⁷



18. Ibid., p. 213.

19. Reich, p. 18.

20. Ibid., p. 18.

21. Hanning, p. 430.

22. Citron, Marcia J., *Gender and the Musical Canon* (New York: Cambridge University Press, 1993), p.96.

23. Bower, p. 263.

24. Ibid., p. 263.

25. Reich, pp. 133-158.

26. Hanning, p. 430.

27. Schumann, pp. 20-21.

Clara: It was now time for me to support my family and I did so by committing to an intense concert schedule and teaching. Dear friends and my own students helped me through my darkest hours. And finally, after two years, I was allowed to see my Robert. He was not eating and so weak he could not speak. “For weeks he had had nothing but wine...I gave it to him—and he took it with the happiest expression and in haste, licking the wine from my fingers (Clara touches her fingertips to her lips and pauses)—ah, he knew that it was I.”²⁸ Two days later my love died. (Clara pauses again).

My loss fueled my desire to uphold my professional reputation. It was now my sole responsibility to support my household and children. Although friends suggested that I play for benefits, I declined. When I did have to borrow, the debt was paid expediently.²⁹

It was a rather daunting task but one that suited me perfectly. Music was my passion and I was fortunate to live in the era of Romanticism. This time in history has given artists the ability to truly express intense emotions—describing their inner most thoughts or perhaps the wonders of the world around them. It has been a time of experimentation—going beyond the boundaries set by the past. I composed a piece of music that I had given to Robert as a birthday gift³⁰ entitled “Lorelei.” It is an example of another interest of Romantic composers—music based “on legends, folk songs, and fanciful tales of romance.”³¹ Let me tell you the story of the “Lorelei.”

Clara and accompanist: (Clara assumes proper singing posture and performs “Lorelei.”)

I do not know what this means,
This haunting nameless pain;
A tale of the bygone ages
Keeps brooding throughout my brain;

The faint air cools in the glooming,
And peaceful flows the Rhine,
The summits that thirst are drinking
The sunset’s flooding wine;

The loveliest maid is sitting
High-throned in yon blue air,
Her golden jewels are shining,
She combs her golden hair;

She combs with a comb that is golden,
And sings a strange refrain
That lingering melody
How it casts a magic spell:

The doomed in his drifting sailboat,
Is tranced by the sad sweet song
He sees not the threat’ning breakers,
He sees only her all alone:

The merciless currents devour him!—
So perish sailor and boat:
And this, with her mournful singing,
Is the Lorelei’s work.
And this, with her mournful singing,
Is the Lorelei’s gruesome work.³²

Clara: Perhaps some of you may someday choose to express yourselves as we of the Romantic era have—be it through music, literature, or perhaps art. Your faces are those of the future... cherish the time you have. It has been so many years that I have been without my Robert. And yes, I have outlived some of my own children. But one thing lives on and is always there for me—my music. Ah yes, a life lived musically is one lived in the past, present and future.

28. Reich, p. 128.

29. Ibid., p. 162.

30. Ibid., p. 319

31. Faber, Nancy and Randall, *Piano Literature Book 3* (Fort Lauderdale, Florida: The FJH Music Company Inc., 1999), p. 5.

32. “An Ancient Legend of the Rhine,” <http://www.readbookonline.net/read/830/10740/>.

Works Consulted

"An Ancient Legend of the Rhine-The Lorelei," 2005,
<http://www.readbookonline.net/read/830/10740>.

Basch, Victor. *Schumann, a Life of Suffering*. New York: A. A. Knopf, 1931.

Bowers, James and Judith Tick. *Women Making Music; The Western Art Tradition, 1150-1950*. Urbana and Chicago: University of Illinois Press, 1986.

Boyd, Melinda. "Gendered voices: The Liebesfruhling Lieder of Robert and Clara Schumann." *19th Century Music* 23, no. 2 (Fall 99): 145-163.

Briscoe, James R., ed. *Historical Anthology of Music by Women*. Bloomington: Indiana University Press, 1987.

Burk, John. *Clara Schumann: a Romantic Biography by John N. Burk*. New York: Random House, 1940.

C. M. Sunday. "Portraits of Anomaly: Nannerl Mozart, Fanny Mendelssohn, Clara Schumann." December 31, 2006. <http://cnx.org/content/ml3247/latest/>.

Cassin-Scott, Jack. *The Illustrated Encyclopaedia of Costume and Fashion: From 1066 To the Present*. London: Studio Vista, 1994.

Citron, Marcia J. *Gender and the Musical Canon*. New York: Cambridge University Press, 1993.

Clara '96 at Clara Schumann.net. "Clara Josephine Wieck Schumann: Short Biography and Quick Facts." <http://www.geneva.edu/~dksmith/clara/bio.html>.

Clara '96 at Clara Schumann. net. "Complete Lieder of Clara Schumann: A Lyric Translation." <http://www.geneva.edu/~dksmith/clara/lyric.html>.

Clark, Michael and Olaf Thyen, ed. *The Oxford-Duden German dictionary: German-English/English-German/edited...* Oxford: Oxford University Press, 2001.

Collins German Concise Dictionary. 4th ed. New York: HarperCollins Publishers, 2007.

Faber, Nancy and Randall, ed. *Piano Literature Book 3 Original Keyboard Classics*. Fort Lauderdale, Florida: The FJH Music Company Inc., 1999.

Hallmark, Rufus. "The Ruckert Lieder of Robert and Clara Schumann." *19th Century Music* 14, no. 1 (Summer 1990): 3-31.

Hanning, Barbara Russano. *Concise History of Western Music*. New York: W. W. Norton & Company, Inc., 2006.

Herbert, May. *Early Letters of Robert Schumann, Originally Published by his Wife*. St. Clair Shores, Michigan: Scholarly Press, 1970.

"History Repeats Itself," December 3, 2001, pythia.uoregon.edu/~lynch/Tango-L/2001/msg01071.html-8k.

Isserlis, Steven. "Dying of love for you." August 5, 2006, <http://arts.guardian.co.uk/print/0,,329545644-110428,00.html>.

Laver, James. *Costume Through the Ages; 1000 Illustrations*. New York: Simon and Schuster: 1963.

- Kimball, Carol. *Song A Guide to Style & Literature*. Redmond, Washington: PST...Inc., 1996.
- Moore, Gerald. *Poet's Love the Songs and Cycles of Schumann*. New York: Taplinger Publishing Company, 1981.
- Nemko, Deborah. *Clara Schumann as Innovator and Collaborator: The Piano Trio in G minor, Op. 17*. Ann Arbor, MI: UMI Company, 1997.
- Neuls-Bates, Carol, ed. *Women in Music: An Anthology of Source Reading from the Middle Ages to the Present*. Boston: University Press, 1996.
- Nunn, Joan. *Fashion in Costume, 1200-1980*. New York: Schocken Books, 1984.
- Payne, Blanche. *History of Costume, From the Ancient Egyptians to the Twentieth Century*. New York: Harper & Row, 1965.
- Randel, Don Michael, ed. *The Harvard Concise Dictionary of Music and Musicians*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1999.
- Reich, Nancy B. and Anna Burton. "Clara Schumann: old sources, new readings." *Musical Quarterly* 70 (Summer 1984): 332-354.
- Reich, Nancy B. *Clara Schumann, the Artist and the Woman/ Nancy B. Reich*. Ithaca, NY: Cornell University Press, 1985.
- Schauffler, Robert Haven. *Florestan; the Life and Work of Robert Schumann, by Robert Haven Schauffler*. New York: H. Holt and Company, 1945.
- Schumann, Clara. *Complete Songs*. Gabriele Fontana and Konstanze Eickhorst. Compact disc. Burkhard Schmilgun and Peter Schilbach: Radio Bremen; Germany, 1994.
- Schumann, Clara. *Sämtliche Lieder Clara Wieck-Schumann*. Isabel Lippits and Deborah Richards. Compact disc. Bietigheim-Bissingen: Bayer Records; New York, 1992.
- Schumann, Clara. *Sämtliche Lieder für Singstimme und Klavier*, ed. Joachim Draheim and Brigitte Hoft. Edition Breitkopf, 1990.
- Schumann, Clara. *Seven Songs*, ed. Kristin Norderval. Bryn Mawr, PA: Hildegard Publishing Company, 1993.
- Schumann, Robert (1810-1856). *85 Songs for Voice and Piano*. Serfius Kagen, ed. New York: International Music Company.
- White, Hilda. *Song Without End*. New York: Dutton, 1959.
- Wilcox, R. Turner. *The Mode in Costume*. New York: Charles Scribner's Sons, 1958.

